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ENGLISH

User Guide

LG G3

MFL68583001 (1.0) BC

www.lg.com

English

LG G3 User Guide

- Screen displays and illustrations may differ from those you see on actual phone.
- Some of the contents of this guide may not apply to your phone, depending on the software and your service provider. All information in this document is subject to change without notice.
- This handset is not suitable for people who have a visual impairment due to the touch screen keyboard.
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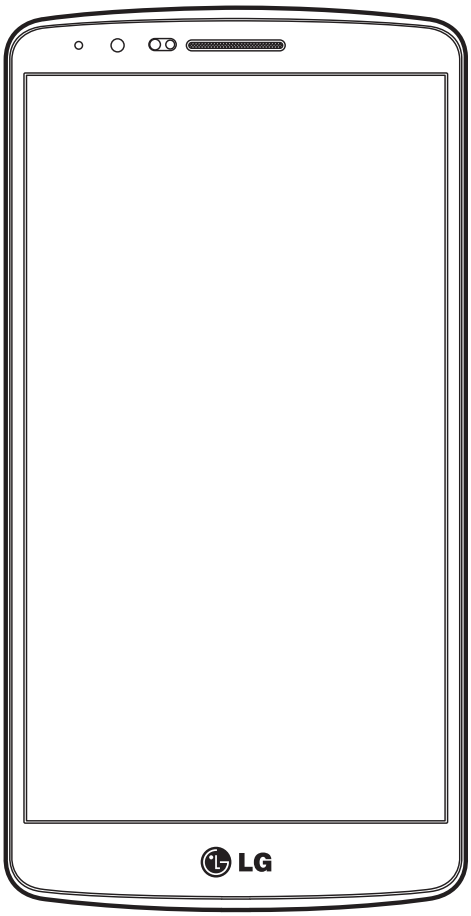

SERVICE ACTIVATION

If you are a new T-Mobile® customer and your service has not been activated, simply call Customer Care at **1-800-937-8997** from your landline phone and a T-Mobile Activations representative will assist you. You will need the following information when activating service:

- Service Agreement and agent code on your Agreement.
- Your name, home address, home phone, and billing address.

NOTE: For business and government accounts, please provide the name of your company or government agency, address, and tax ID.

- Your Social Security number, current driver's license number, and date of birth for credit check purposes.
- Your choice of T-Mobile rate plan and services (see http://www.t-mobile.com/ for the latest plan information).
- SIM serial number and IMEI number (located on the box bar code label).

By activating service, you acknowledge that you have read, understand, and agree to be bound by each of T-Mobile's Terms and Conditions and your Service Agreement.

About this user guide

Please read this user guide carefully before you use your phone and keep it handy for future reference.

Should your phone fails to operate correctly, refer to the FAQ section.

- Some features and service may vary by area, phone, carrier, plan and version of phone software.
- Screen displays and illustrations on this user manual may differ from those you see on the actual phone.
- Designs and specifications of the phone and other accessories are subject to change without any notice.

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Important notice

Please check to see if any problems you have encountered with your phone are described in this section before taking the phone in for service or calling a service representative.

1. Phone Memory

In order to make more memory available, you will have to manage your applications and delete some data, such as applications or messages.

Managing Applications

1 From the Home screen, tap > > **Settings** > **General** tab > **Apps**.

2 Tap one of the available options at the top of the screen and select the application you want to uninstall.

3 Tap **Uninstall** and then tap **OK** to confirm that you want to uninstall the desired application.

2. Optimizing Battery Life

You can extend your battery's life between charges by turning off features that you don't need to run constantly in the background. You can also monitor how applications and system resources consume battery power.

To extend the life of your battery

- Turn off radio communications that you aren't using, such as Wi-Fi, Bluetooth, or GPS.
- Wi-Fi will be set to On the first time you use your newly purchased phone.
- Lower screen brightness and set a shorter screen timeout.
- Turn off automatic syncing for Gmail, Calendar, Contacts, and other applications.
- Some applications you have downloaded may cause your battery power to be reduced.
- While using downloaded applications, check the battery charge level.

NOTE: If you accidently press the Power/Lock Key while the device is in your pocket, the screen will turn off automatically in order to save battery power.

To view the battery charge level

1 From the Home screen, tap > > **Settings** > **General** tab > **Battery**.

2 The battery status (charging or discharging) and level are displayed on the screen.

To monitor and control what uses the battery

1 From the Home screen, tap > > **Settings** > **General** tab > **Battery**.

2 Tap the battery icon.

3 A list all of the applications or services using battery power from the greatest amount of energy used to the least amount. You can also use it to turn off applications or services if they are consuming too much power. Tap any of the listed items for more options.

3. Installing an Open Source Operating System

Installing an open source operating system on your phone and not using the operating system provided by the manufacturer can cause your phone to malfunction.

Warning!

- If you install and use an operating system other than the one provided by the manufacturer, your phone is no longer covered by the warranty.
- To protect your phone and personal data, download applications only from trusted sources, such as Play Store. If some applications are not properly installed on your phone, your phone may not work properly- or serious errors may occur. You will need to uninstall those applications and all of its data and settings from the phone.

4. Using a Screen Lock

Set a screen lock to secure your phone. To set the screen lock, follow the process below.

From the Home screen, tap > > **Settings** > **Display** tab > **Lock screen** > **Select screen lock** and select a desired screen lock from **None, Swipe, Face Unlock**, **Knock Code**, **Pattern**, **PIN** and **Password**.

NOTE: In case that you have trouble with Face Unlock, you can unlock the screen a Backup Pattern or PIN.

Warning! Take precautions when using an unlock Pattern, PIN, or Password. It is very important that you remember the screen unlock information you set. You are allowed 5 attempts to enter your screen unlock information. If you used up all 5 opportunities, you will have to wait 30 seconds to attempt unlocking the phone again.

When you can't recall your Unlock Pattern, PIN, or Password:

If you logged into a Google account on the phone and failed to use the correct pattern 5 times, tap **Forgot pattern?** You will be required to sign in with your Google account and prompted to create a new unlock pattern.

If you have set a backup PIN, you can unlock the screen with keying in the backup PIN.

If you haven't created a Google account on the phone and you forgot your PIN, Password, and the backup PIN, you need to perform a hard reset.

Caution If you perform a hard reset, all user applications and user data will be deleted. Please remember to back up any important data before performing a hard reset.

Read ALL steps before attempting.

1. Turn the phone off.
2. Press and hold the following keys at the same time: **Volume Down Key** + **Power/Lock Key** on the back of the phone.
3. Release the **Power/Lock Key** only when the LG logo is displayed, then immediately press and hold the **Power/Lock Key** again.
4. Release all keys when the Factory hard reset screen is displayed.
5. Press the **Volume Keys** to highlight **Yes**, then press the **Power/Lock Key** to continue.
6. Press the **Volume Keys** to highlight **Yes**, then press the **Power/Lock Key** once more to confirm.
7. Your device will perform a factory reset.

5. Using Safe Mode

Using Safe mode

To recover your phone when malfunctioning.

1. Turn off your phone and reboot. When you see the T-Mobile booting animation press and hold the **Volume Down Key** until you see the Home screen.

   OR

   While the phone is on, press and hold the **Power/Lock Key** until the Phone options menu is displayed. Then touch and hold **Power off** and tap **OK**. Your Home screen will then be displayed with the words "Safe mode" in lower left corner.
2. From the Home screen, tap > > **Settings** > **General** tab > **Apps**.
3. Tap one of the available options at the top of the screen and select the application you wish to uninstall.
4. Tap **Uninstall** and **OK** to confirm.
5. After uninstalling the application, turn off and reboot your phone.

6. Connecting your phone to a computer via USB

1 Use the USB cable that was provided with your phone to connect the phone to a USB port on your computer. You'll receive a notification that the USB is connected and can see USB connection mode screen.

2 Tap **Media device (MTP)** or **Send images (PTP)** to confirm that you want to transfer files between your phone and the computer.

When the phone is connected as USB storage, you receive a notification. Your phone is recognized as a device on your computer. You can now copy files to and from the phone.

7. Unlock screen when using data connection

Your screen will go dark if untouched for a period of time when using a data connection. To turn on your LCD screen, press the **Power/Lock Key** . To change the length of time the screen takes to turn off, tap > > **Settings** > **Display** tab > **Screen timeout** and select the desired amount.

8. Internal antenna

Please hold the mobile phone straight up as a regular phone.

While making/receiving calls or sending/receiving data, try to avoid holding the lower part of the phone where the antenna is located. It may affect call quality.

9. When the screen freezes

If the phone does not respond to user input or the screen freezes:
Press and hold the **Power/Lock Key** for 10 seconds to reboot it.

10. Do not connect your phone when you power on/off your PC

Make sure to disconnect your phone from the PC when powering your PC on or off as it might result in PC errors.

11. Hardware key control mode

If your phone display is damaged or broken, you can answer an incoming call, end a call, or turn off an alarm using the hardware keys.

1. Turn your phone off.
2. Press and hold the **Power/Lock Key** and the **Volume Keys** at the same time for more than 6 seconds to enter the Hardware key control mode.
3. Press the **Volume Keys** to scroll to the desired option, then press the **Power/Lock Key** to confirm.
   - **Answer a call**: Press the **Volume Keys** at the same time.
   - **End a call**: Press the **Power/Lock Key** during a call.
   - **Stop an alarm**: When an alarm rings, press and hold the **Volume Up Key** or **Volume Down Key** to stop the alarm.

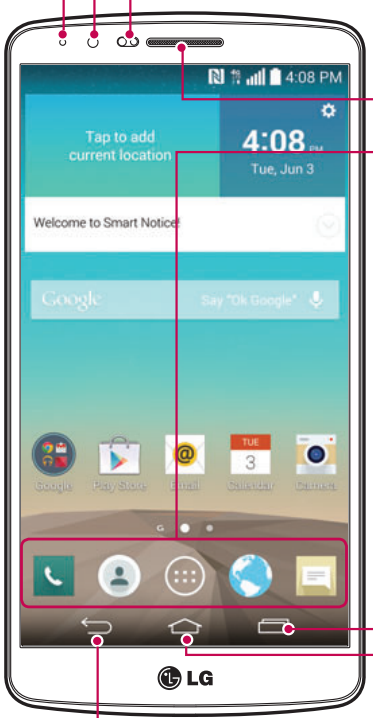
NOTE: If you use your phone with a broken display glass, your phone can break even more or you can be injured. Make sure to visit the LG authorized service center to get your phone repaired.

Getting to know your phone

To turn on the phone, press and hold the **Power/Lock Key** on the back side of the phone for 3 seconds.

To turn off the phone, press the **Power/Lock Key** on the back side of the phone for 3 seconds and tap **Power off** and **OK** to confirm.

Front view



Notification LED

Front Camera Lens

- Use to take a picture of yourself or to video chat on supported applications.

Proximity Sensor

- Senses proximity toward other objects, such as your head during a call, so that you do not accidentally activate unwanted features.

Earpiece

Quick Keys

- Gives you quick access to your most used applications.
- To add an icon, drag and drop it in the bar.
- To remove an icon, touch and hold it and remove it from the bar.

Recent Apps Key

- Displays available options for the current screen or application.
- Touch and hold to display the available options for the current app or screen.

Home Key

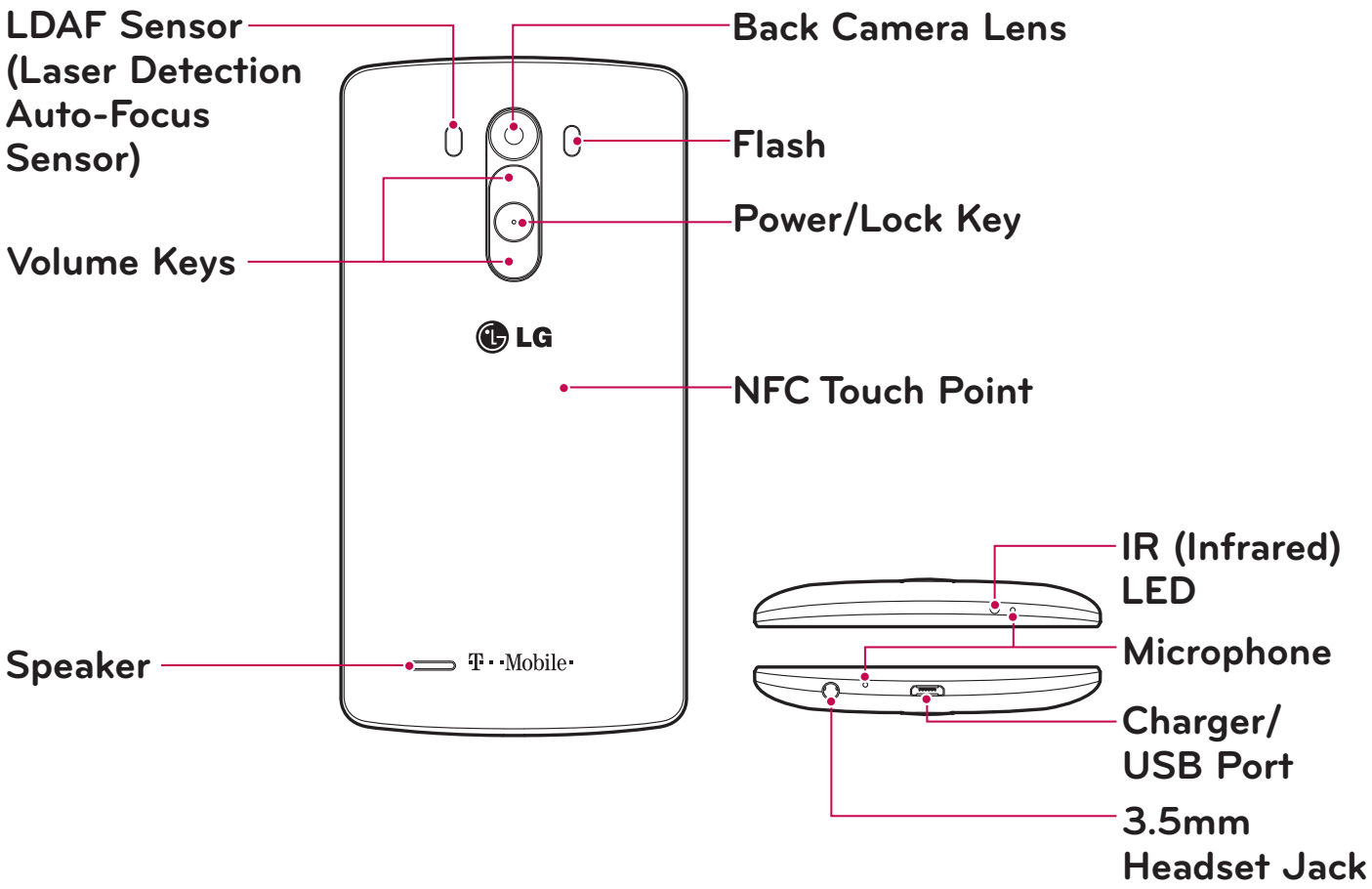
- Returns to the Home screen from any screen.
- Touch and hold to access Google Now

Back Key

- Returns to the previous screen.
- Closes pop-up menus and dialog boxes.
- Touch and hold to access the Dual window feature.

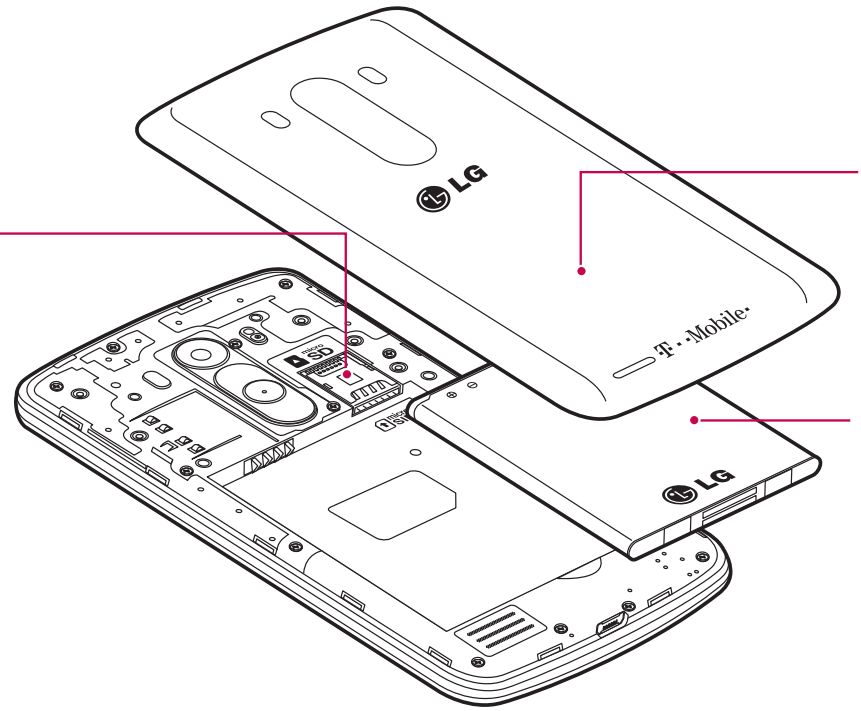
Warning! Placing a heavy object on the phone or sitting on it can damage its LCD and touch screen functionalities. Do not cover the LCD's proximity sensor with a protective film. This can cause the sensor to malfunction.

Side view



NOTE: LDAF Sensor (Laser Detection Auto-focus Sensor) :
This sensor measures the distance to the subject using laser technology and allows for improved focusing speed and object detection in low-light situations.

Rear view



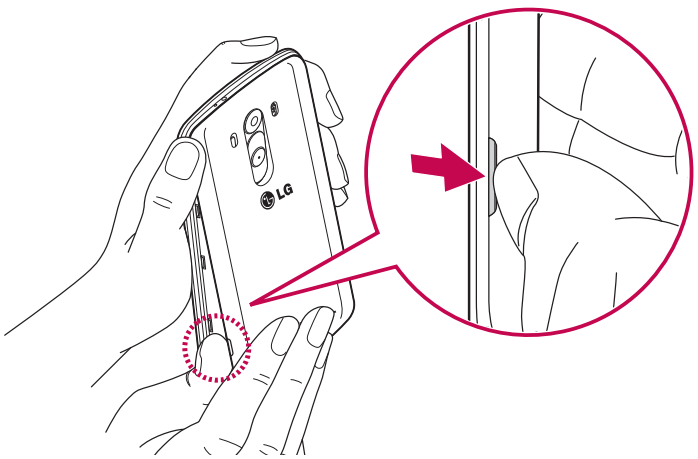
Notice

The NFC antenna for this model is on the back cover.

Installing the SIM card and battery

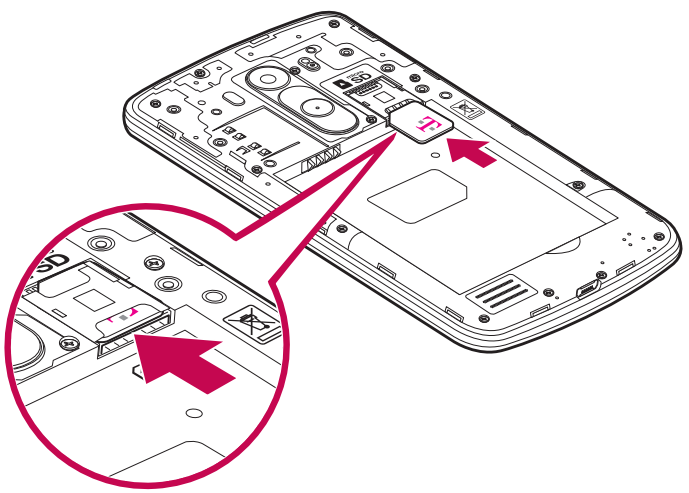
Before you can start exploring your new phone, you'll need to set it up. To insert the SIM card and battery:

1 Hold the phone on your hand firmly. With the other hand, lift the back cover using the fingertip cutout located on the left side of the cover and remove it.

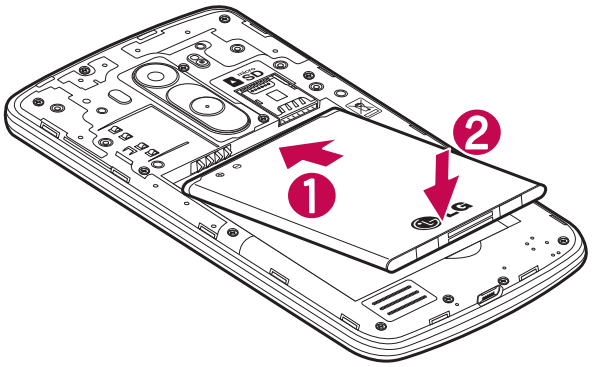


2 Slide the SIM card into the SIM card slot. Make sure the gold contact area on the card is facing downwards.

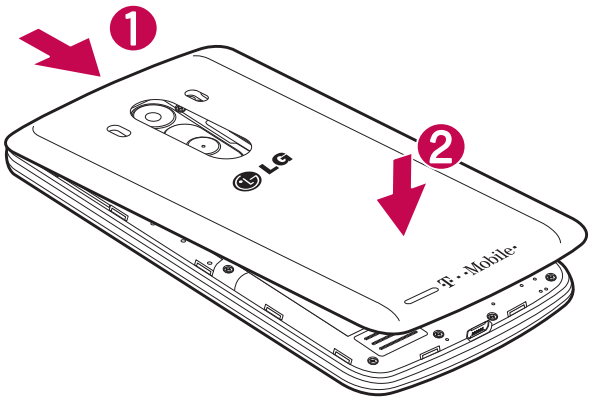
NOTE: Please insert the notched side of the SIM card first. Refer to the image inscribed below the SIM card slot. The SIM card slot is located at the bottom of the dual card slot.



3 Insert the battery into place by aligning the gold contacts on the phone and the battery ❶ and press the battery down until it clicks into place ❷.

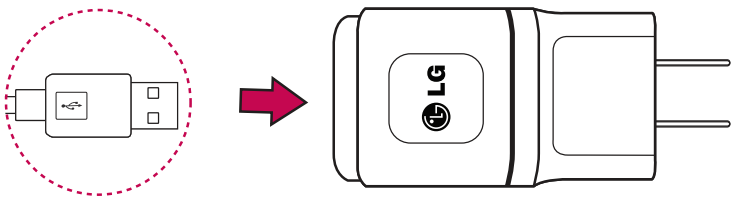


4 Replace the back cover of the phone ❶. Apply a steady downward pressure until the back cover clicks into place ❷.

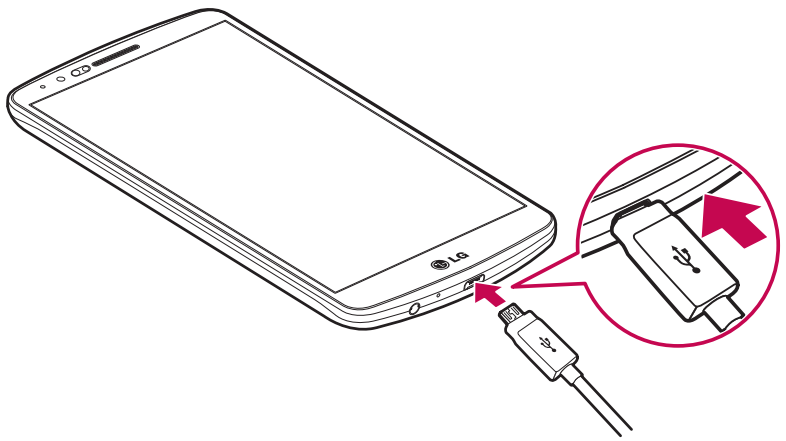


Charging your phone

1 Connect the wall adapter and USB cable as shown below. The USB symbol on the USB cable should face toward you.



2 Plug the USB cable (as shown below) into the phone's Charger/Accessory Port. Make sure the USB symbol is facing upwards.



Always unplug the charger from the wall socket after the phone is fully charged to save unnecessary power consumption of the charger.

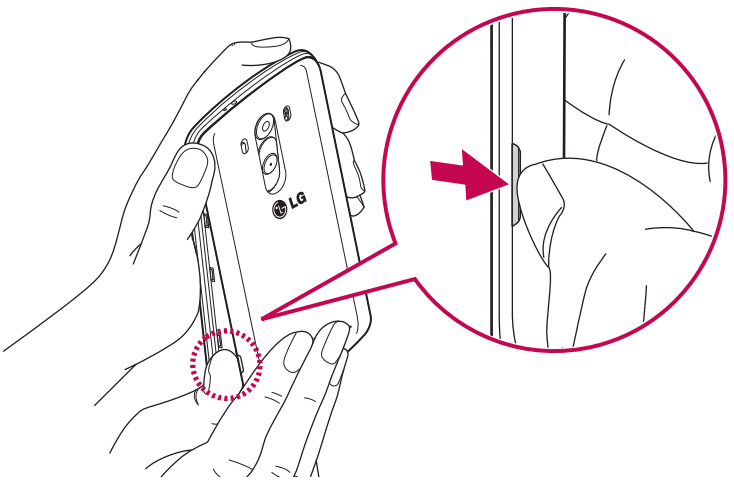
NOTE:

- The battery must be fully charged initially to improve battery lifetime.
- Your phone has an internal antenna. Be careful not to scratch or damage this rear area, as that will cause loss of performance.
  When the battery becomes fully discharged and you connect the phone to a charger, the LED lights for the keys at the bottom of the phone will blink. This is normal operation for a completely discharged battery to prevent overflowing current because the phone is designed to provide reasonable protection against damage to the battery. Once the battery has enough charge, the screen will turn on and display a battery image.

Inserting a microSD card

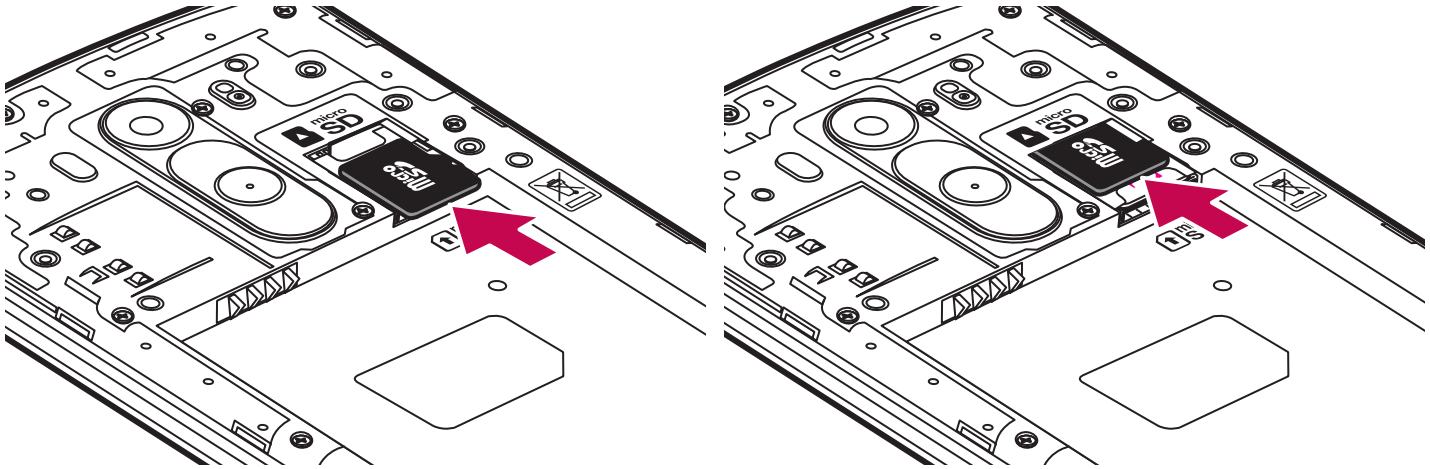
NOTE: This device supports up to a 2TB microSD card.

1 Remove the back cover.



2 Gently insert the microSD card into the slot. Make sure the gold contact area is facing downwards.

NOTE: Please insert the notched side of the microSD card first. Refer to the image next to the microSD card slot. The microSD card slot is located at the top of the dual card slot.



NOTE: Some downloaded applications store data on the microSD card as well as on the phone. Due to this feature, if you skip the unmount procedure, it can cause an error because information between the microSD card and the phone is not accorded properly. In the worst case, the microSD card can be corrupted or damaged.

Removing the microSD card

To safely remove the microSD card from your phone, you must first unmount it.

1 From the Home screen, tap > > **Settings** > **General** tab > **Storage** > **Unmount SD card**.

2 Remove the back cover and gently pull the microSD card from the slot.

Warning! Do not remove the microSD card without unmounting it first. Otherwise, it may damage the microSD card as well as your phone, and the data stored on the microSD card may be corrupted.

Formatting the microSD card

Your microSD card may already be formatted. If it isn't, you must format it before you can use it.

NOTE: All files on the card are deleted when you format the microSD card.

1 From the Home screen, tap > > **Settings** > **General** tab > **Storage** > **Unmount SD card**.

2 Tap **Erase SD card** twice.

3 If you set an unlock pattern, enter it and tap **Erase everything.** The card will then be formatted and ready to use.

NOTE: If there is content on your microSD card, the folder structure may be different after formatting since all the files will have been deleted.

Switching between and exiting applications

Multi-tasking is easy with Android because open applications keep running even when you open another application. There is no need to quit an application before opening another. Use and switch among several open applications. Android manages each application, stopping and starting them as needed, to ensure that idle applications don't consume resources unnecessarily.

Switching between applications

- Tap the **Recent Apps Key** . A list of recently used applications will be displayed. Then tap the application you want to access.
- To remove an application from the list, swipe the app preview to the left or right.

To stop/exit an application

1 From the Home screen, tap > > **Settings** > **General** tab > **Apps**.

2 Tap one of the tabs at the top of the screen, choose the desired application and tap **Force stop** (or **Stop**) to stop the application.

Your Home screen

Touch screen tips

With the touch of your finger, you can access available applications, make menu selections, and access data saved to your phone. The following terms are used for describing the different available actions using the touchscreen:

Tap - A single finger tap selects items, links, shortcuts and letters on the on-screen keyboard.

Touch and hold - Touch and hold an item on the screen by touching it and not lifting your finger until an action occurs. For example, to open a contact's available options, touch and hold the contact in the Contacts list until the context menu opens.

Drag - Touch and hold an item for a moment and then, without lifting your finger, move your finger on the screen until you reach the target position. You can drag items on the Home screen to reposition them.

Swipe or slide - To swipe or slide, quickly move your finger across the surface of the screen, without pausing when you first touch it (so you don't drag an item instead). For example, you can slide the screen up or down to scroll through a list, or browse through the different Home screens by swiping from left to right (and vice versa).

Double-tap - Double-tap to zoom on a Web page or a map. For example, quickly double-tap a section of a Web page to adjust that section to fit the width of the screen. You can also double-tap to zoom in and out when using Maps.

Pinch-to-Zoom - Use your index finger and thumb in a pinch or spread motion to zoom in or out when using the browser, Maps, Camera, or browsing pictures.

Rotate the screen - From many applications and menus, the orientation of the screen adjusts to the device's physical orientation.

NOTE:

- To select an item, tap the center of the icon.
- Do not to press too hard; the touch screen is sensitive enough to pick up a light, firm touch.
- Use the tip of your finger to tap the option you want. Be careful not to tap any other keys or icons.

Proximity sensor

When receiving and making calls, this sensor automatically turns the backlight off and locks the touch keypad by sensing when the phone is near your ear. This extends battery life and prevents the touch keypad from activating unintentionally during calls.

NOTE: When turning the screen on while holding the phone in a horizontal position, make sure you do not cover the proximity sensor. Doing so will turn the screen off immediately after turning it on.

Lock your phone

When you are not using the phone, press the **Power/Lock Key** to lock your phone. This helps prevent accidental presses and saves battery power.

Also, if you do not use the phone for a while, the Home screen, or other screen you are viewing, is automatically replaced with the lock screen after 30 seconds (depending on the screen timeout settings) of inactivity to conserve the battery and prevent pocket dialing.

To wake up your phone, press the **Power/Lock Key**. The lock screen will appear. Swipe the screen in any direction to unlock. The last screen you were working on opens.

NOTE:

- The automatic screen timeout can be configured manually in Settings. To change it, tap > > **Settings** > **Display** tab > **Screen timeout**.
- If there are any programs running when you lock the phone, they may still be running in lock mode. It is recommended that you exit all programs before entering the lock mode to avoid unnecessary charges (e.g., phone call, web access and data communications).

KnockON

The KnockON feature allows you to double-tap the screen to easily turn it on or off.

To turn the screen on

1 Double-tap the center of the Lock screen to turn the screen on.

2 Unlock the screen or access any of the available shortcuts or widgets.

To turn the screen off

1 Double-tap an empty area of the Home screen or the Status Bar.

2 The screen will turn off.

NOTE:

- Tap on the center area of the screen. If you tap on the bottom or the top area, the recognition rate may decrease.

Quick Switch to Silent/Vibrate Mode

To quickly set your phone to silent or vibrate mode, slide the Status Bar down and tap until or appears.

Home Screen Overview

The main Home screen is the starting point for many applications and functions, and it allows you to add items like application icons, shortcuts, folders or widgets to give you instant access to information and applications. This is the default page and accessible from any menu by tapping the **Home Key** .

On your Home screen, you can view menu icons at the bottom of the screen. Menu icons provide easy and one-touch access to the functions you use the most.

Navigating Through the Home Screen Canvases

Your phone has several Home screen canvases. If you like, you can place different applications on each of the Home screen canvases.

From the main Home screen canvas, swipe the screen with your finger in either direction. The main Home screen canvas is located in the middle. To add more canvases, pinch in on the Home screen and tap .

You can also customize each canvas with shortcuts, folders, and widgets.

Submenu Options

Submenus are available when you are at any Home screen or have selected a feature or application such as Phone, Contacts, Messaging or Browser.

1. Touch the **Menu** icon on the screen. A submenu will be displayed on the phone screen.
2. Tap an option.

Customizing your Home screen

You can customize your Home screen by adding quick access items, such as shortcuts to an application, widgets, or changing the wallpaper.

- **Apps**: Add shortcuts to applications on the Home screen.
- **Widgets**: Add dynamically updating widgets to your Home screen to allow quick access to applications without opening the full application.
- **Wallpapers**: Change the Home screen wallpaper.

To add shortcuts to apps or widgets on the Home screen:

1. Select a location (Home screen canvas) to add an item by swiping the Home screen from left to right or vice versa.
2. Touch and hold an empty part of the Home screen.
3. Tap the type of item you want to add on the screen: **Apps** or **Widgets**.
4. Tap the desired app or widget.

5 You will see a new icon on the Home screen. To place it on a different canvas, touch and hold it to drag it to the desired location and release your finger from the screen.

TIP!
To add a preloaded application or an application you have downloaded from Play Store to the Home screen, simply touch and hold the icon you want in the Apps screen and drag it to the desired Home screen canvas.

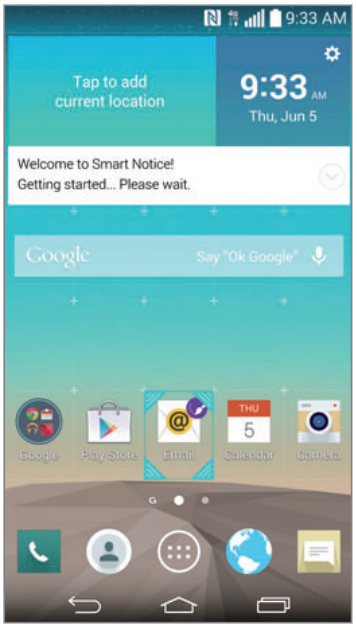
NOTE: If there is no available space on a particular Home screen panel, you must delete or remove an item before you can add another item. In this case, you have the option of switching to another Home screen panel.
To delete an application icon from the Home screen, touch and hold the shortcut icon or widget you want to delete and drag to **Remove** at the top of the screen. When changes to , lift your finger.
You cannot delete the preloaded applications. (Only their icons can be deleted from the screen).

Customizing apps icons on the Home screen

You can create your own custom application icon(s) using the images in your Gallery.

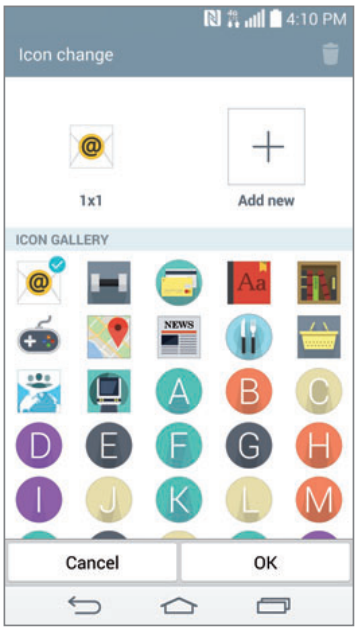
1 Touch and hold an application icon until it's unlocked from its current position. Then drop it on the screen. The editing icon will appear in the upper right corner of the application.

NOTE: If an icon you placed can be resized, you will see a blue box around the icon after you touch, hold and release it. Drag the edges of the box to resize it.



2 Tap the application icon.

3 Tap the icon design you want from the available Icon Gallery. Or you can tap **Add new**, select a size, and select an image from your Galllery.



Your Home screen

NOTE:

- Your customized application icon(s) are only applied to icons on your Home screen. The Applications screen is not affected.
- Your custom photo icons are saved so you can easily select them for any of your icon images.

Creating Application Folders on the Home screen

You can create application folders to hold similar applications if you wish.

On the Home screen

1 Touch and hold an icon to unlock it from its positions. Then drag it over another icon and release it.

2 A folder will be created.

On the Apps screen

1 From the Home screen, tap the **Apps Key** to open the Apps screen, then tap the **Menu** icon at the top right of the screen.

2 Tap the desired icon, then touch and hold the desired icon to release it from its position.

3 Drag the icon over another icon and release it to create a folder.

Customizing the Apps screen

1 From the Home screen, tap the **Apps Key** .

2 Tap the **Apps** tab at the top of the screen to go to the Apps screen, if it is not already selected.

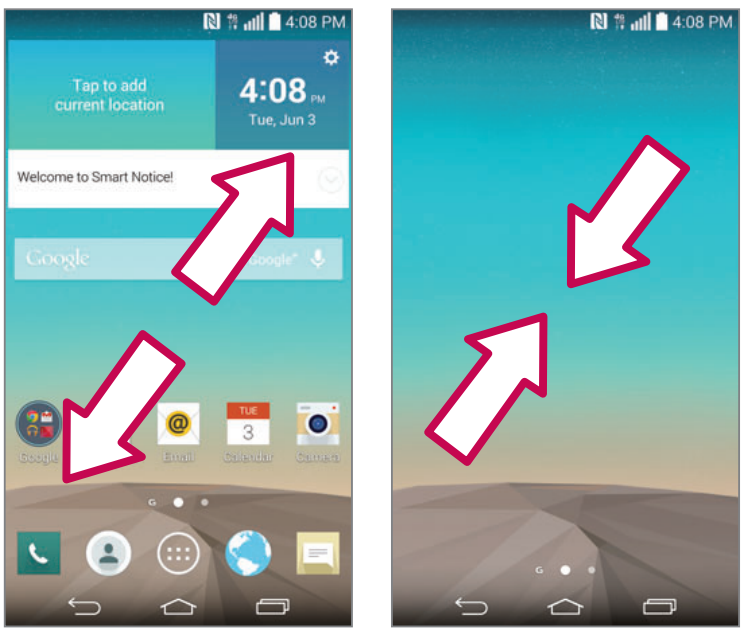
3 Tap **Menu** icon to access the following Applications screen options:

- **View apps by**: Tap to sort your applications either in alphabetical order, by downloaded date, or user customized.
- **Show small/large icons**: Tap to change the application icons to either small or large, then tap Yes to set your choice.

- **Hide/Show apps**: Tap to set which application icons will be displayed in your Applications screen. Checkmark the icons you want to hide, then tap .
- **Edit/Uninstall apps**: Tap to view app information or uninstall apps.
- **Home screen settings**: Tap to directly access to the phone's Home screen settings menu.

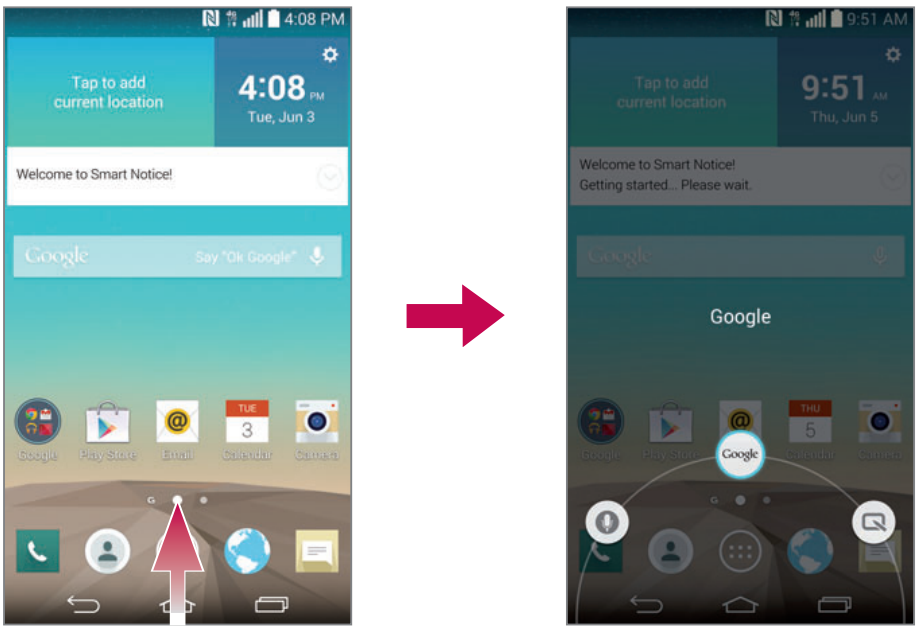
Home screen clean view

You can see the wallpaper without items on the Home screen by placing two fingers on the screen and pinching out. Pinch in or tap the **Back Key** to see applications and widgets again.



Quick access

To view the quick access items, touch anywhere in the front key area and drag up. The following options are available: Voice Mate, Google Now, and QuickMemo+.

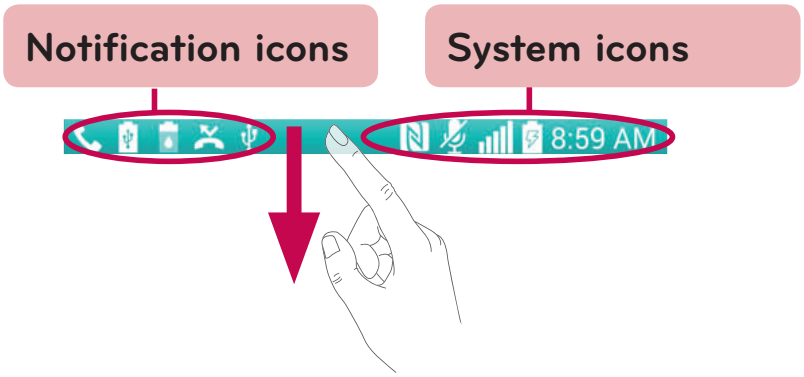


Notifications

Notifications alert you to the arrival of new messages, calendar events, and alarms, as well as to ongoing events, such as video downloads. From the Notifications panel, you can view your phone's current status and pending notifications.

When a notification arrives, its icon appears at the top of the screen. Icons for pending notifications appear on the left, and system icons showing things like Wi-Fi or battery strength on the right.

NOTE: The available options may vary depending on the region or service provider.



Accessing notifications

Swipe the Status Bar down to open the Notifications panel to access notifications. To close the Notifications panel, swipe the bar at the bottom of the screen upwards.

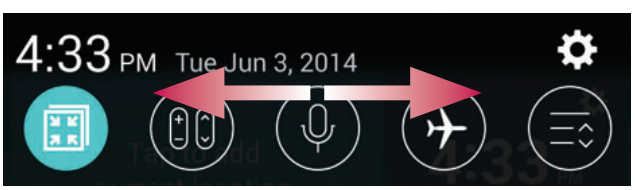
Quick Settings

Use the Quick Settings to easily toggle function settings like Wi-Fi, manage display brightness and more. To access the Quick Settings, swipe the Status Bar down to open the Notifications panel and select any of the available Quick Setting apps at the top of the screen.

NOTE: Touch and hold an icon on the Quick Settings menu to go directly to that setting's menu screen.

Customizing the Quick Setting items on the Notification panel

Open the Notifications panel, swipe the Quick Settings to the left, and tap . To rearrange items, drag to the desired location. To add more icons, select the desired functions. A blue checkmark will indicate that the Quick Setting is enabled.



Notification icons on the Status Bar

Notification icons appear on the Status Bar at the top of the screen to report missed calls, new messages, calendar events, device status and more.

The icons listed in the table below are some of the most common ones.

Icon	Description
	No SIM card inserted
	No network signal available
	Airplane mode is on
	Connected to a Wi-Fi network
	Wired headset connected
	Call in progress
	Missed call
	Bluetooth is on
	NFC is on
	System warning
	An alarm is set
	New voicemail available

Icon	Description
	Vibrate mode is on
	Battery fully charged
	Battery is charging
	Phone is connected to PC via USB cable
	Downloading data
	Uploading data
	GPS is on
	Data is synchronizing
	New Gmail message available
	New Hangouts message available
	New text or multimedia message
	A song is currently playing

Icon	Description
	Ringer is silenced
	Media Server content sharing on

Icon	Description
	Choose input method

On-screen Keyboard

You can enter text using the on-screen keyboard. The on-screen keyboard displays automatically on the screen when you need to enter text. To manually display the keyboard, simply tap a text field where you want to enter text.

There are two types of keyboards that you can use: Google voice typing and LG Keyboard.

To select the keyboard:

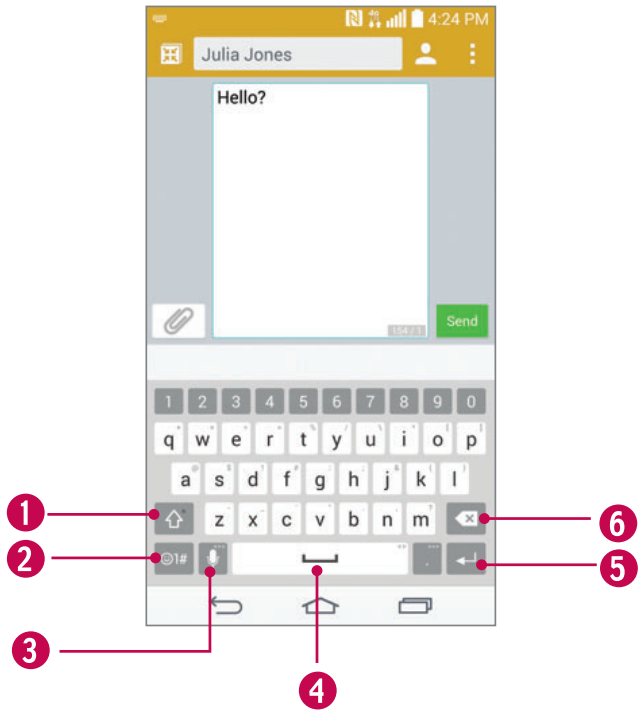
1. From the Home screen, tap > > **Settings** > **General** tab > **Language & input** > **Default** (under the Keyboard & Input Methods section).
2. Select the default keyboard between **Google voice typing** and **LG Keyboard**.

OR

1. While entering text, drag the Status Bar down and tap **Choose input method**.
2. Select the desired input method from **Google voice typing** or **LG Keyboard**. (default).

NOTE: You must enable the additional input methods in order for this method to be available.

LG keyboard - Letters Entry



❶ **Shift Key** - Tap once to capitalize the next letter you type. Double-tap for all caps.

❷ **Symbols Key** - Tap to change the input to number and symbol entry.

❸ **Voice Input/Handwriting/Clip Tray/Settings Key** - Tap to access Voice Input. Touch and hold to access Handwriting, Clip Tray, and Keyboard settings.

❹ **Space Key** - Tap to enter a space.

❺ **Enter Key** - Tap to move the cursor to the next line.

❻ **Delete Key** - Tap to delete characters to the left of the cursor.

LG keyboard - Numbers and Symbols Entry

❶ **Letters Key** - Tap to change the input to letters entry.
❷ **Emoji Mode** - Tap to enter emoji characters.
❸ **Space Key** - Tap to enter a space.
❹ **Enter Key** - Tap to move the cursor to the next line.
❺ **Delete Key** - Tap to delete characters to the left of the cursor.

123 Mode

This mode allows you to enter numbers in a text message (a telephone number, for example) more quickly. Tap the keys corresponding to the required digits before manually switching back to the appropriate text entry mode by tapping ☺1# on the LG Keyboard.

Entering Special Characters

The on-screen keyboard allows you to enter special characters (e.g., "á").

To enter a special character, touch and hold the desired key (touch the "a" key for example).

After the special character appears, slide your finger over it and lift it off it to enter it.

NOTE: A symbol at the top right corner of a key indicates that additional characters are available for that key.

Using Clip Tray

Easily access the contents you stored in the Clip Tray whenever and wherever you want. You can copy images or texts and keep them in the Clip Tray. Then, you can paste them whenever and wherever you want.

1. Touch and hold text and images while eding them and tap **Clip Tray**.
2. Touch and hold the text input field and select Clip Tray. You can also access the **Clip Tray** by touching and holding > .

NOTE:

- You can save up to 20 items in the Clip Tray.
- To delete items from the Clip Tray, tap , then select the items you want to delete, and tap **Done**.
- This function may not be supported in downloaded apps.

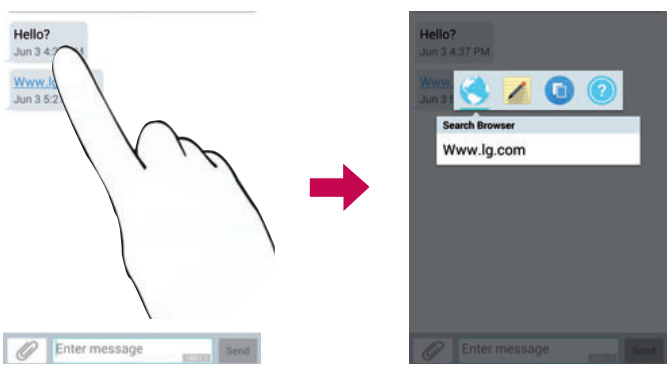
Text Link

Text Link recommends apps related to text in messages or other selected text. It connects directly to the Calendar, Contacts, Phone, Messaging, Email, Web, Maps, YouTube, Calculator, and more.

NOTE:

- If your phone is set to English or Korean, Text Link performs more functions than in other language settings.
- Overly long sentences are subject to limitations.
- Arithmetic operators (such as +, -, * and /) start the Calculator.
- If Text Link is not linked to an app, the Browser can be used for searching.

To use Text Link:



- Tap a message bubble with the icon.
- Highlight text on a webpage or emails and select **Text Link**.

Google account setup

The first time you open a Google application on your phone, you will be required to sign in with your existing Google account. If you do not have a Google account, you will be prompted to create one.

Creating your Google account

1. From the Home screen, tap the **Apps Key** .
2. Tap **Settings** > **General** tab > **Accounts & sync** > **Add account** > **Google** > **New**.
3. Enter your username and tap . Your phone will communicate with Google servers and check for username availability.
4. Enter and re-enter your password. Then follow the instructions and enter the required and optional information about the account. Wait while the server creates your account.

Signing into your Google account

1. From the Home screen, tap the **Apps Key** .
2. Tap **Settings** > **General** tab > **Accounts & sync** > **Add account** > **Google** > **Existing**.
3. Enter your email and password and tap .
4. Read the disclaimer about signing in and checkmark if you want to keep updated with news and offers from Google Play. Then tap **OK**.
5. After signing in, you can use Gmail and take advantage of Google services on your phone.
6. Once you have set up your Google account, your phone will be automatically synchronized with your Google account on the web. (Depending on your synchronization settings.)

After signing in, your phone will sync with your Google services, such as Gmail, Contacts, Google Calendar, and Picasa photo albums. You can also use Maps, download applications from Play Store, back up your settings to Google servers, and take advantage of other Google services on your phone.

IMPORTANT

- Some applications, such as Calendar, work only with the first Google Account you add. If you plan to use more than one Google Account with your phone, be sure to sign into the one you want to use with such applications first. When you sign in, your contacts, Gmail messages, Calendar events, and other information from these applications and services on the web are synchronized with your phone. If you don't sign into a Google Account during setup, you will be prompted to sign in or to create a Google Account the first time you start an application that requires one, such as Gmail or Play Store.
- If you have an enterprise account through your company or other organization, your IT department may have special instructions on how to sign into that account.

Calls

HD™ Voice

Your phone is also HD Voice enabled, which means you can enjoy unparalleled voice quality in areas with HD Voice service. Experience the crystal clear difference of HD Voice from T-Mobile on calls between T-Mobile customers each using an HD Voice enabled phone while in areas with available HD Voice service.

NOTE: HD Voice service is available in select markets.

Making a call

1. From the Home screen, tap the **Phone Key** to open the keypad.
2. Enter the number on the keypad. To delete a digit, tap the **Clear Key**.
3. Tap the **Call Key** to make a call.
4. To end a call, tap the **End Key**.

TIP!
To enter "+" to make international calls, touch and hold 0 +.

Calling your contacts

1. From the Home screen, tap **Contacts** to open your contacts.
2. Scroll through the contact list or tap the **Search contacts** field and enter the first letter(s) of the contact you want to call. You can also tap the letters at the right side of the screen.
3. In the list that is displayed, tap the contact you want to call.
4. In the Contact Info screen, tap the phone number you wish to call.

Answering and rejecting a call

When the screen is locked

When your phone rings, swipe the **Answer** icon in any direction to answer the incoming call.

Swipe the **Decline** icon in any direction to reject an incoming call.

NOTE:

- If the **Answer an incoming call** gesture is activated, you can bring the phone up to your ear to answer incoming calls.
- Tap or swipe the **Decline with message** if you want to send a message to the caller. If the caller is unknown, the **Decline with message** is not available.

Adjusting the in-call volume

To adjust the in-call volume during a call, use the Volume Keys on the back side of the phone.

Making a second call

1. During your initial call, tap the **Menu** icon and select **Add call.**
2. Dial the number or search your contacts.
3. Tap the **Call Key** to connect the call.
4. Both calls will be displayed on the call screen. Your initial call will be put on hold.
5. Tap the Call entry on the screen to toggle between active calls or tap **Merge calls** to merge the calls.

TIP!

Tap **Manage members** to end individual calls or separate calls from a conference call.

6 To end active calls, tap the **End Key** .
If there is no active call, it will end the call on hold.

NOTE: You will be charged for each call you make.

Viewing your call logs

From the Home screen, tap the **Phone Key** and the **Call logs** tab.
You can view a complete list of all dialed, received, and missed voice calls.

TIP!

- Tap any single call log entry to view the date, time, and duration of the call.
- Tap the **Menu** icon , then tap **Clear all** to delete all the recorded items or **Clear** to delete individual or groups of entries.

Call settings

You can configure phone call settings, such as call forwarding, and other special features offered by your carrier.

1 From the Dial pad screen, tap the **Menu** icon and tap **Call settings**.

2 Set any of the available options.

Contacts

You can add contacts on your phone and synchronize them with the contacts in your Google Account or other accounts that support syncing contacts.

Searching for a contact

1 From the Home screen, tap the **Apps Key** and tap **Contacts** to open your contacts.

OR

From the Home screen, tap the **Phone Key** > **Contacts** tab.

2 Tap the **Search contacts** field and enter the contact name using the keypad. You can also tap the letters at the right side of the screen.

Adding a new contact

1 From the Home screen, tap the **Phone Key** and enter the new contact's number. Tap the **Menu** icon > **Add to Contacts** > **New contact** or **Update contact.**

2 Select the account where you want to add the new contact. Locations depend on the type of accounts you have added to your device.

NOTE: The entry fields varies depending on the account.

3 If you want to add a picture to the new contact, tap . Choose from **Take photo** or **Select from Gallery**. Then browse for an image and select it.

4 Tap to enter more specific name information.

5 Enter the details about your contact.

6 Tap **Save** to save the contact entry.

Favorite Contacts

You can classify frequently called contacts as favorites.

To add a contact to your favorites

1 From the Home screen, tap the **Apps Key** and then **Contacts** to open your contacts.

2 Tap a contact to view its details.

3 Tap the star to the right of the contact's name. The star turns gold and the contact is added to your favorites.

To remove a contact from your favorites list

1 From the Home screen, tap the **Apps Key** and then **Contacts**.

2 Tap the **Favorites** tab.

3 Tap a contact to view its details.

4 Tap the gold star to the right of the contact's name. The star turns grey and the contact is removed from your favorites.

Creating a group

1 From the Home screen, tap the **Apps Key** and then **Contacts**.

2 Tap **Groups** > **Menu** icon > **New group**.

3 Enter a name for the new group. You can also set a ringtone for the newly created group.

4 Tap **Add members**, select the contacts you want to add to the group, then tap **Add**.

5 Tap **Save** to save the group.

NOTE: If you delete a group, the contacts assigned to that group will not be lost. They will remain in your contacts.

Messaging

Your phone combines text and multimedia messaging into one intuitive, easy-to-use menu.

Conversation view

Messages exchanged with another party are displayed in chronological order so that you can conveniently see an overview of your conversation.

Sending a message

1. Tap **Messaging** on the Home screen, then tap to create a new message.
2. Enter a contact name or phone number in the **To** field. As you enter the contact name, matching contacts appear. You can tap a suggested recipient. You can also add multiple contacts.

NOTE: You will be charged for a text message for every person you send the message to.

3. Tap the text field and start entering your message.
4. Tap the **Menu** icon to open the options menu. Choose from any of the available options.
5. Tap **Send** to send your message.

TIP!

- The 160-character limit may vary from country to country depending on how the text message is coded and the language used in the message.
- If an image, video, or audio file is added to a text message, it will be automatically converted into a multimedia message and you will be charged accordingly.
- If an image, video, or audio file is added to a text message, it will be automatically converted into a multimedia message and you will be charged accordingly.

Messaging

NOTE: When you get a text message during a call, there will be an audible notification.

Using smilies

Liven up your messages using smilies and emojis.

When writing a new message, tap the **Menu** icon > **Insert smiley**. To access emojis, tap on the LG keyboard and choose an emoji category to view the available emojis.

Changing the conversation theme

Sets how your conversations are displayed.

1. Open the **Messaging** app and tap the **Menu** icon > **Settings** > **Conversation theme**.
2. Tap the **Wallpaper** tab to choose the conversation background. Choose from the 6 options provided, a photo from your Gallery, or take a picture to use.
3. Tap the **Bubble** tab to choose the conversation style. Choose from the 6 options provided.

Changing your message settings

Your phone's message settings are predefined, so you can send messages immediately. You can change the settings based on your preferences.

- From the Home screen, tap **Messaging** > **Menu** icon > **Settings**.

Email

You can use the Email application to read email from providers other than Gmail. The Email application supports the following account types: POP3, IMAP and Microsoft Exchange (for Enterprise users).

To open the Email application

- From the Home screen, tap the **Apps Key** > **Email** .

The first time you open the Email application, a setup wizard opens to help you add an email account.

Microsoft Exchange Email Account

Username – Enter the account user name.

Password – Enter the account password.

Email address – Enter the account email address.

Server address - Enter the email server address.

Domain – Enter the account domain (optional).

Port number - Normally each account's default number will be displayed.

Use secure connection (SSL) – Choose whether or not to use SSL for Microsoft Exchange.

Client certificate – Allows you to add a client certificate (if necessary).

Other (POP3 & IMAP4) Email Account

Email address – Enter the account email address.

Password – Enter the account password.

Incoming server settings

POP/IMAP server – Select protocol type, either POP or IMAP.
Security type – Choose from Off, SSL, or TLS.
Port number – Normally each account's default number will be displayed.
Username – Enter the account username.
Password - Enter the account password.

Outgoing server settings

SMTP server – Enter the outgoing email server address.
Security type – Choose from Off, SSL, or TLS.
Port number – Normally each account's default number will be displayed.
Username – Enter the account username.
Password - Enter the account password.

To open your Combined inbox

If you have configured email to send and receive email from more than one account, you can view all messages sent to all accounts in your Combined inbox.

- Open the **Email** application and touch

. Then touch **Inbox** under **Combined view**.

Messages in the Combined inbox are color coded on the left, by account.

When a new email arrives in the Inbox, there will be sound and/or vibration notification (depending on your current sound and vibrate settings).

Composing and Sending Email

1 In the **Email** application, tap **Compose** .

2 Enter an address for the message's intended recipient. As you enter text, matching addresses will be offered from your contacts. Separate multiple addresses with commas.

3 Tap the **Cc/Bcc** field to copy or blind copy to other contacts/email addresses.

4 Tap the text field and enter your message.

5 Tap to attach the file you want to send with your message.

6 Tap to send the message.

If you are not ready to send the message, tap the **Menu** icon > **Save draft** to save it in a Drafts folder. Touch a message in the Drafts folder to resume working on it. Your message will also be saved as a draft if you touch the **Back Key** before sending it.

Tap the **Menu** icon > **Discard** to abandon and delete a message, including any saved drafts. If you are not connected to a network, for example if you're working in airplane mode, the messages you send are stored in your Outbox folder until you're connected to a network. If it contains any pending messages, the Outbox will be displayed on the Accounts screen.

NOTE: The messages sent using an Exchange account will not be stored on the phone; they will be stored on the Exchange server itself. If you want to see your sent messages in the Sent folder, you may need to open the Sent folder and tap the **Menu** icon > **Refresh**.

Working with Account Folders

Each account has **Inbox**, **Outbox**, **Sent**, **Drafts** and **Trash** folders. Depending on the features your account service provider supports, you may have additional folders.

Adding and Editing Email Accounts

To add an email account

1 From the Home screen, tap the **Apps Key** > **Email** .

2 Select the desired email provider.

If an email account is already set up, the wizard is not activated automatically. In this case, tap the **Menu** icon > **Settings** > **Add account** .

Email

To change account settings

1 Open the **Email** application.

2 Tap the **Menu** icon > **Settings**.

3 Tap **General settings** to adjust the settings that affect all accounts. Or tap an individual account to adjust settings only for that account.

To delete an email account

1 Open the **Email** application.

2 Tap the **Menu** icon > **Settings**.

3 Select the account(s) you want to delete and tap **Remove account**.

4 Tap **Yes** to confirm.

Social Networking

With your phone, you can enjoy social networking and manage your micro-blog in on-line communities. You can update your current status, upload photos, and view your friends' status updates in real-time.

You can add your Facebook, Google+, and Twitter accounts to your phone. If you don't have an account, you can visit their sites to set one up.

NOTE: Additional costs may be incurred when connecting and using online services. Check your data charges with your network provider.

Adding an account to your phone

1 From the Home screen, tap > > **Settings** > **General** tab > **Accounts & sync**.

2 Tap **Add account**.

3 Tap any social networking service you want to use.

4 Enter your email address and password that you set up for your social networking account, then tap **Sign in** or **Log in**.

Adding a social networking widget on the Home screen

If you add a social networking widget on your Home screen, the widget will show your status when your phone receives updates from the network.

You can also access the social community directly by tapping the widget.

1 Touch and hold an empty spot on the Home screen.

NOTE: If there is no available space on a particular Home screen panel, you won't be able to add any widget; you must delete or remove an item before you can add another item. In this case, you have the option of switching to another Home screen panel.

2 Tap the **Widgets** tab and scroll to the right or left until you see the social network you want.

3 Tap the desired widget to add it to the Home screen panel.

Syncing accounts on your phone

You can sync information from your social networking accounts with your Contacts and other functions on your phone, if applicable.

1 From the Home screen, tap > > **Settings** > **General** tab > **Accounts & sync**.

2 Checkmark **Auto-sync data** to activate automatic synchronization.

3 Tap the account you want to sync.

4 Check the desired options, such as Contacts.
A checkmark indicates that synchronization has been enabled.

NOTE: To manually sync an account, tap the **Menu** icon > **Sync now**.

Removing accounts on your phone

1 From the Home screen, tap > > **Settings** > **General** tab > **Accounts & sync**.

2 Tap the account(s) you want to delete, then **Menu** icon > **Remove account** > **OK**.

Getting to know the viewfinder

You can use the camera or camcorder to take and share pictures and videos. Your phone comes with a 13 megapixel camera with an autofocus feature that lets you capture sharp pictures and videos.

NOTE: Be sure to clean the protective lens cover with a microfiber cloth before taking pictures. A lens cover with smudges from fingers can cause blurry pictures with a "halo" effect.

1. **Menu icon** – This icon allows you to alternate between Normal view and Clean view. It is used when you want to show or hide the camera menu.
2. **Flash** – Tap to turn the flash **On, Off** or set it to **Auto**.
3. **Swap camera** – Allows you to swap between the rear camera lens and the front camera lens.
4. **Shot mode** – Allows you select the shot mode from **Auto, Magic focus, Panorama, Dual**.
5. **Settings** – Touch this icon to open the settings menu.
6. **Gallery** – This enables you to access your saved photos and videos within the camera mode. Simply tap and your Gallery will appear on the screen.
7. **Record** – Allows you to start recording.
8. **Capture** – Allows you to take a photo.

Take Pictures

Taking pictures with your phone's built-in camera is as simple as choosing a subject, pointing the lens, and pressing a button.

To take a picture:

1. Tap > > **Camera** .
2. Frame your subject on the screen.
3. A square around the subject indicates that the camera has focused.
4. Tap , if displayed, or simply tap the screen. Your picture will be automatically saved to the Gallery.

Record Videos

In addition to taking pictures, you can record, view, and send videos with your phone's built-in video camera.

1. Tap > > **Camera** .
2. Frame your subject on the screen.
3. Tap to start recording the video.
4. The length of the recording is displayed on the top of the screen.

NOTE: Tap to take pictures while recording video.

5. Tap to pause recording video. You can resume recording again by tapping .

   OR

   Tap to stop recording. Your video will be automatically saved to the Gallery.

Camera and Video Settings

From the camera mode, tap each icon to adjust the following camera settings.

- Tap to turn the flash **On**, **Off** or set it to **Auto**.

- Allows you to swap between the rear camera lens and the front camera lens.

- Tap to set the capture mode. Choose from Auto, Magic focus, Panorama, and Dual.

- **Auto**: Captures a photo shot using automatic settings.
- **Magic focus**: Allows you to change the focus after taking a photo. After taking the photo, access the image and adjust the focus.
- **Panorama**: Creates a wide photo of a panoramic view. Hold the phone horizontally, press the shutter to start and slowly sweep the camera across the scene.
- **Dual**: Captures a photo or records a video using both of camera lens. Touch and hold the small screen to resize or move it.
- **Help**: Displays help information for camera features.

- Adjust the following camera and video settings.

- **Dynamic tone (HDR)**: Combines photos taken at multiple exposures into one optimal photo to get a better photo in tricky lighting situations.
- **Image/Video size**: Set the size of your picture and video. Choose from **13M (4160x3120), W10M (4160x2340), 9M (3120x3120)** or **3M (2048x1536)** for pictures. Choose from **UHD (3840x2160), FHD (1920x1080), HD (1280x720)** or **120HD (Slow Motion)** for videos.
- **Voice shutter**: Allows you to take pictures with voice commands. When on, you just say "**Cheese**", "**Smile**", "**Whiskey**", "**Kimchi**", or "**LG**" to take a picture.
- **Timer**: Set your camera's timer. This is ideal if you want to be a part of the picture or video.
- **Grid**: Allows you to take better pictures and record better videos by displaying a grid line for help with alignment.

- **Storage:** Set the storage location for your pictures and videos. Choose from **IN** (internal memory) and **SD** (memory card). This menu appears only when the SD card is inserted.
- **Help**: Allows you to learn how a function works. This icon will provide you with a quick guide.

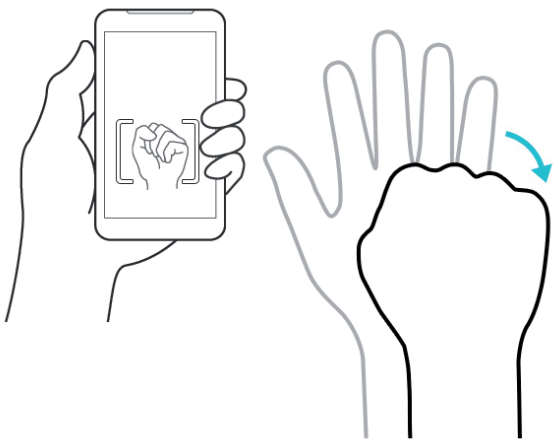
NOTE: The shutter sound is not available when Vibrate mode or Silent mode is enabled.

Multi-point Auto Focus

When you take a picture, the Multi-point Auto Focus (AF) function operates automatically and will allow you to see a clear image.

Gesture shot

The Gesture shot feature allows you to take a picture with a hand gesture using the front camera. To take photo, raise your hand, with an open palm, until the front camera detects it and a box appears on the screen. Then close your hand into a fist and a timer will start, allowing you time to get ready.



Super Zooming

You can use a zoom up to 8 times while taking pictures.

TIP!
This function operates automatically while zooming in and out.

NOTE: Use a steady hand. This feature does not work with some functions Objects can be overlapped when taking a picture of fast-moving subjects.

View Your Pictures

The Gallery is where you can access the Gallery of stored camera images. You can view them in a slideshow, share them with your friends, and delete and edit them.

1 Tap > > **Gallery** .

2 Select a location and tap an image to view your picture.

Gallery Options

The Gallery application presents the pictures and videos in your storage, including those you've taken with the Camera application and those you downloaded from the web or other locations.

If you have one of your phone's Google™ Accounts, you'll also see your Picasa web albums in Gallery.

1 Tap > > **Gallery** to view the images stored in the storage.
- Drag left or right to view more albums.

2 Tap an album to open it and view its contents. (The pictures and videos in the album are displayed in chronological order.)

3 Tap a picture in an album to view it.
- Tap a picture group again to reveal the following icons:

- **Edit**: Allows you to edit the picture using various options.
- **Camera**: Opens the Camera.
- **Share**: You can share the picture via various methods such as Messaging or Bluetooth.
- **Delete**: Deletes the picture.

Tap a picture in an album then tap the **Menu** icon for the following options: **SmartShare, Set image as, Move, Copy, Copy to Clip Tray, Lock, Slideshow, Rotate left, Rotate right, Crop, Add location, Rename, Print** and **Details**.

Tap to return to the previous screen.

Assign Pictures

After taking a picture, assign it as a picture ID for a Contacts entry or as the Home screen background image (wallpaper).

1. Tap > > **Gallery** .
2. Tap an album and tap an image to view it.
3. With the picture displayed, tap the **Menu** icon > **Set image as**.
4. Select an option.
   - **Contact photo** to assign the picture to a Contact entry as a picture ID. Tap an entry from Contacts, crop the image and tap **OK** to assign the picture.
   - **Home screen wallpaper** to assign the picture as a background image, crop the image and tap **OK** to assign the picture.
   - **Lock screen wallpaper** to assign the picture as a background image for your lock screen.
   - **Wallpaper** to assign the picture as a background image, crop the image and tap **SET WALLPAPER** to assign the picture.

Dual Camera

The Dual Camera feature allows you to take a picture or record video with the front and rear cameras at the same time.

1 Tap > > **Camera** .

2 Tap the **Menu** icon > MODE > **Dual** .

NOTE:

- Drag the small screen to move it to your desired location.
- Touch and hold the small screen to resize it.
- Tap on the small screen to switch screens.

3 Tap to take a dual photo.

OR

Tap to record a video, then tap to stop dual recording.

Video Options

The Gallery is where you can access the Gallery of stored video images. You can view them, share them with your friends, and delete and edit them.

1 Tap > > **Gallery** to view the videos stored in storage.

- Scroll left or right to view more albums.

2 Tap an album to open it and view its contents. (The pictures and videos in the album are displayed in chronological order.)

3 Tap a video to view it. You can access the following options:
- **QSlide**: Enables an overlay on your phone's display for easy multitasking.
- **SmartShare**: Shares media files with DLNA certified devices.
- **Menu**: Tap to access **Screen ratio, Subtitles, Share, Trim, Settings,** and **Details**.
- **Volume**: Tap to display the Volume slider bar, then adjust the playback volume on the slider bar.
- **Lock/Unlock**: Locks the touch keys to prevent unintentional touches.

Play a Video

1 Tap > > **Gallery** to view the videos stored in storage.
- Scroll left or right to view more albums.

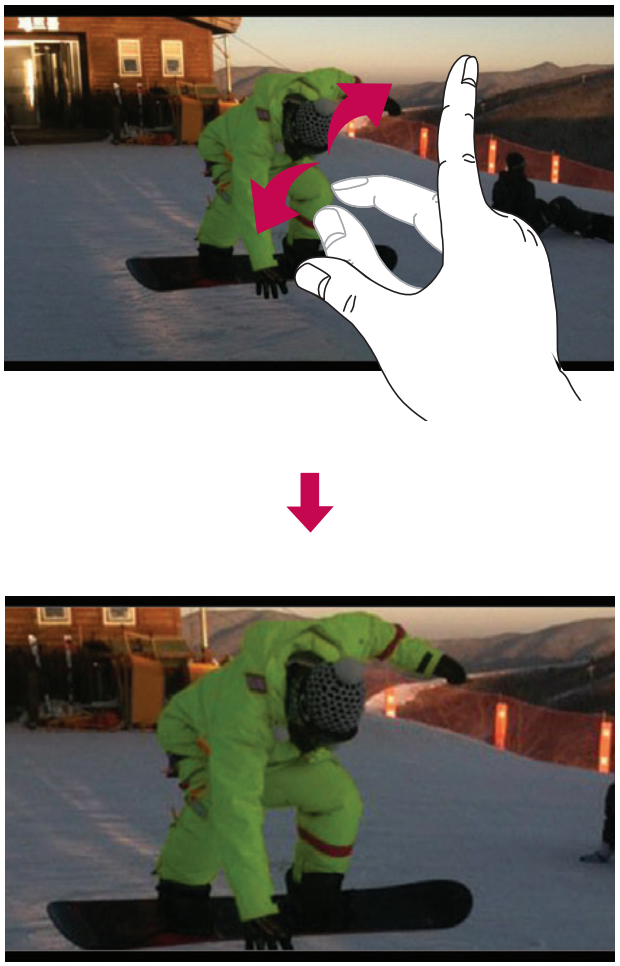
2 Tap an album to open it and view its contents. (The pictures and videos in the album are displayed in chronological order.)

3 Tap a video in an album to play.
- Tap the video to view the playback controls.

NOTE:
- While a video is playing, slide the left side of the screen up or down to adjust the screen brightness.
- While a video is playing, slide the right side of the screen up or down to adjust the sound.
- While playing a video, tap the timeline point to preview that portion of the video via a small screen. Tap the small screen to jump to that part of the video.
- While playing a video, slide your finger from left to right (or vice versa) to fast-forward and rewind.

Live Zoom

Live Zoom allows you to zoom in or zoom out on a portion of a video that is being played to make the desired section appear larger or smaller.
When viewing a video, use your index finger and thumb in a pinching or spreading motion to zoom in or out.



NOTE: Do not press too hard; the touch screen is sensitive enough to pick up a light, but firm touch.

Dual Play

Dual Play (connected wired or wirelessly to two displays) can be run on a different screen.

NOTE:

- Connect two devices using wired (Slimport-HDMI) cable or wirelessly (Miracast).
- The connectable device can be a TV or a monitor supported by an HDMI cable or Miracast.
- The Gallery, Videos and ThinkFree Viewer apps are supported on Dual Play. mall screen. Tap the small screen to jump to that part of the video.
- Tap ⌂ once when two displays are a different status (i.e. the monitor is playing a video and your phone's video app is displaying empty screen), then Dual Play will start.
- Not all videos are supported by Dual Play.
- Dual Play operates at 1280X720 or higher display resolution.

Multimedia

You can store multimedia files to external and internal memory to have easy access to all your image and video files.

Gallery

From the Home screen, tap the **Apps Key** > **Gallery** .

Music

Your phone has a music player that lets you play all your favorite tracks. To access the music player from the Home screen, tap the **Apps Key** and tap **Music** .

How to save music/video files to the phone

Connect your phone to the PC using the USB cable.

You'll receive a notification that the USB is connected and the USB connection type prompt is displayed. Tap **Media device (MTP)** or **Send images (PTP)** and open the folder you wish to view from your computer.

Save music or video files from the PC to the phone.

- If there is a video file with a subtitle file (.smi file with the same name as the video file), place them in the same folder to display the subtitle automatically when playing the video file.
- When downloading music or video files, copyright must be secured. Please note that a corrupted file or file with a wrong extension may cause damage to the phone.

Playing a song

1 From the Home screen, tap the **Apps Key** and tap **Music** .
2 Tap the **Songs** tab.
3 Tap the song you want to play.
4 Tap to pause the song.
5 Tap to skip to the next song.
6 Tap to go back to the beginning of the song. Tap twice to go back to the previous song.

To change the volume while listening to music, press the Volume Keys on the back side of the phone.

Touch and hold a song to access the following options: **Play**, **Add to playlist**, **Delete, Share, Set as ringtone, Details** and **Search.**

Working with Playlists

You can create playlists to organize your music files into sets of songs, which you can play in the order you set or in a shuffle.

To create a playlist

1 When viewing the library tap > **Playlists**.
2 Tap > **New playlist.**
3 Enter a name for the playlist, then tap **OK**.
4 Select the songs you want to add to the playlist and tap **Add**. The new playlist is added to the Playlists library.

To add a song to a playlist

Touch and hold a song and tap **Add to playlist**. Then choose the name of the playlist. You can also add the song that is playing in the Playback screen by tapping the **Menu** icon ⋮ then tapping **Add to playlist** and selecting the desired playlist.

To remove a song from a playlist

1. Open a playlist.
2. Touch and hold the song you want to remove, then tap **Remove from playlist**.

To rename a playlist

1. Open the **Playlists** library.
2. Touch and hold the playlist to display the options menu, then tap **Rename**.
3. Enter the desired name and tap **OK**.

To delete a playlist

1. Open the **Playlists** library.
2. Touch and hold the playlist to display the options menu, then tap **Delete**.
3. Tap **Yes** to confirm.

NOTE: Music file copyrights may be protected by international treaties and national copyright laws. Therefore, it may be necessary to obtain permission or a licence to reproduce or copy music. In some countries, national laws prohibit private copying of copyrighted material. Before downloading or copying the file, please check the national laws of the relevant country concerning the use of such material.

Google Applications

About Google applications

Google applications, including mobile versions of Gmail, Hangouts, Google Calendar, and Google Maps, are loaded on your phone.

1 To set up a Google account, tap any Google application, enter your user name and password and sign in.

2 After signing in, your contacts, email, and calendar in your Google account will automatically synchronize with your phone.

Launch Google Maps

1 From the Home screen, tap the **Apps Key** > **Maps** .

2 Tap . The map centers on a blue circle that indicates your location. An arrow indicates the direction the device is facing. A transparent blue circle around the dot indicates that your actual location is within the circle.

❶ Tap to access various features on Google Maps.

❷ Tap to view your current location.

To get an address and additional information for a location:

1 Touch and hold a location on the map. A bar with the address and a thumbnail from Street View (if available) opens at the bottom of the screen.

2 Drag the bar upwards to access additional options.

To utilize Google Maps:

1 From the Home screen, tap the **Apps Key** > **Maps** .

2 Pinch out or in to zoom in or out of the current map view.

OR

Tap each icon at the top of the screen.

- (Search) to search for a location.
- (Directions) to get directions.
- (Your activity) to access your favorite places.
- (Menu) to view locations and additional information overlaid on the map.

To search for a location:

1 While viewing a map, tap .

2 In the search box, enter the place you're looking for. Red markers indicate search matches on the map.

- You can enter an address, a city, or a type of business or establishment. For example, "theater in New York."

3 Tap a marker to display a bar that contains the name and travel information. Drag the bar upwards to open a screen with more information about the location, as well as options for obtaining directions.

To get directions:

1 While viewing a map, tap .

2 Enter a starting point in the Start point field, or leave as is to allow GPS to find your location, and your destination in the End point field.
- To reverse directions, tap .

3 Tap the icon for car, public transit, biking, or walking directions.

4 The directions to your destination appear as a blue route. Select a gray route if you prefer it.

5 Drag the bar up to view directions as text or tap to navigate to the destination.

Play Store

Play Store lets you browse through and download thousands of fun and useful applications and games. You can check other users' comment regarding an application or you can post your own comments. If you install applications and games from Play Store, they appear in the phone's menu below the preloaded applications, and you can find them by scrolling down with your finger. You can open downloaded applications from the Play Store by tapping the **Menu** icon > **My apps**.

NOTE:

- To purchase a paid app, you'll need to set up a payment method with Google Wallet™. You have the option to use a credit card or charge to your carrier bill.
- When you want to exit a game or application, use the **Home Key** or **Back Key**, which will return you to the Home screen. Or select Menu (or Options) within the game or application and select Exit. (Exit option may vary by game/application). Ending applications that continue to run in the background (after going back to the Home screen) will help conserve battery life and reduce unwanted data usage.

Gmail

Gmail can be configured when you first set up your phone. Depending on your synchronization settings, Gmail on your phone is automatically synchronized with your Gmail account on the web.The inbox conversations list is your default view.

Tap the **Menu** icon for the following additional options: **Refresh, Label settings, Settings, Send feedback,** and **Help**.

Compose - Allows you to compose a new message.

Search - Allows you to search your account.

Accounts & Labels - Allows you to view your accounts and labels.

NOTE: Drag the screen downwards to refresh and check for new email.

Hangouts

The Hangouts application lets you have real-time text conversations with your friends.

To open the Hangouts application

From the Home screen, tap the **Apps Key** > **Google** folder > **Hangouts** .

To sign out of Hangouts

From the Hangouts home screen, tap the **Menu** icon > **Settings** > tap the desired account > **Sign out**.

Chatting with Friends

1. From the Home screen, tap the **Apps Key** > **Google** folder > **Hangouts** .
2. Tap to view your contacts list. It includes all of the Google Accounts you've added.
   - Tap the name of the person in your contacts list. If your friend is not yet on Hangouts, you can invite your friend via SMS.

OR

- Tap the text field to enter a name, email, or number.

3 Tap **Message** and then enter your message.

4 Tap the **Send** .

Hangouts chatting list

Touch and hold the friend in the chat screen. You can set below options.

	Tap to turn the notifications off.
	Tap to archive the conversation.
	Tap to delete the conversation.

Blocking your Friends

- To block a friend from exchanging messages with you, tap the friend in the chatting list. Tap the **Menu** icon > **People & options**. Then tap the block option.
- To remove a friend from the blocked list, from the chatting list, tap the **Menu** icon > **Settings** > tap the desired account > **Blocked people**. Then tap **Unblock** next to the person's name.

Hangouts Settings

- From the chatting list, tap the **Menu** icon to choose from **Set mood..., Invites, Snooze notifications, Archived Hangouts, Settings, Send feedback,** and **Help**.
- While chatting, tap the **Menu** icon to choose from **People & options, New group Hangout, Turn history off, Archive, Delete, Send feedback,** and **Help**.

QSlide

The QSlide function enables an overlay on your phone's display for easy multitasking.

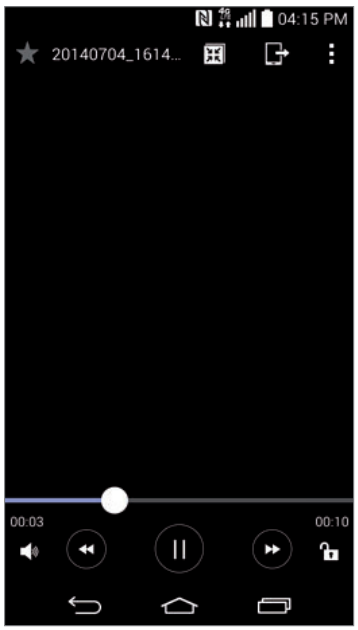
1 While using an app that supports QSlide, tap to access QSlide.
OR
Open the Notifications Panel and touch an app from the **QSLIDE APPS** bar.

NOTE: The QSlide Quick Setting must be enabled to access the QSLIDE APPS bar.

2 Use the slider to adjust the transparency of the overlay. You can also tap to go back to full view.

3 You can make a call, or choose other phone options.

4 Tap to exit the QSlide function.



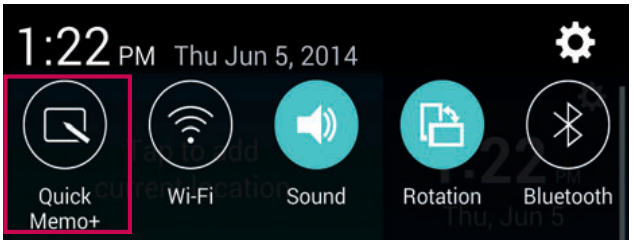
NOTE: The QSlide function can support up to two windows at the same time.

QuickMemo+

The QuickMemo+ feature allows you to create memos and capture screen shots.

You can use QuickMemo+ to easily and efficiently create memos during a call, with a saved picture or on the current phone screen.

1 Touch and drag the Status Bar down and tap . You can also access it using the Quick Access feature.



2 Create a memo using the following options:

- - Tap to undo the most recent action.
- - Tap to redo the most recently deleted action.
- - Tap to insert text into your memo.
- - Tap to select the pen type and color.
- - Tap to use the eraser to erase the pen marks on the memo.
- - Tap to save the memo you've created.
- - Tap to hide or display the toolbar.

NOTE: Please use a fingertip while using the QuickMemo+ feature. Do not use your fingernail.

3 Tap to save the current memo to the **QuickMemo+** or **Gallery**.

Discard QuickMemos:

- Tap the **Back Key** .

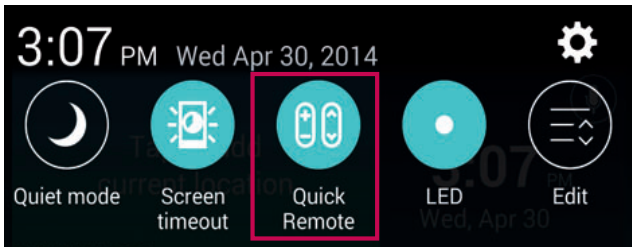
View the Saved Memo

From the Home screen tap the **Apps Key** > **Gallery** and select the **QuickMemo+** album or tap **QuickMemo+** and select the desired memo.

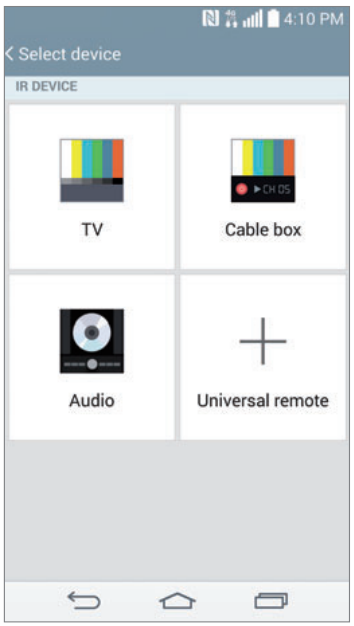
Quick Remote

QuickRemote turns your phone into a Universal Remote for your home TV, cable box, and audio system.

1 From the Home screen, tap the **Apps Key** > **Quick Remote** > .
OR
Touch and slide the Status Bar downwards and touch > **ADD REMOTE**.



2 Select the type of device and its manufacturer, then follow the on-screen instructions to configure the device(s).



Utilities

TIP!

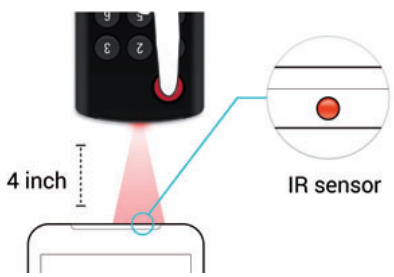
- To quickly use the QuickRemote feature, touch and slide the Status Bar downward and tap on the Quick Settings bar to activate it.
- Touch the **Menu** icon to select **Magic Remote setting, Edit remote name, Learn remote, Move remote, Delete remote, Settings,** and **Help**.

NOTE: QuickRemote features an ordinary remote control and infrared (IR) signals to operate the same way. Therefore, be careful not to cover the infrared sensor when you use the QuickRemote feature. This function may not be supported depending on the model, the manufacturer or service company.

Universal remote

You can create your own personalized universal remote and choose where to place all of the buttons.

1. From the Home screen tap the **Apps Key** > **Quick Remote** .
2. Tap > **Universal remote**.
3. Enter the Remote name and touch **OK**.
4. Place the buttons you want on the remote at the desired location and tap **Next**.
5. Tap the button to be learned.
6. Point original remote 4 inches away from the IR receiver at the top of the phone.
7. Press and hold the button on the original remote for 2 seconds.



Using the Magic Remote feature

Magic Remote controls your TV using a Touchpad and Smart Text(keyboard). Magic Remote is compatible only with LG Smart TVs released in 2012 and after.

1. Select the remote you want, and then tap the **Menu** icon > **Magic Remote setting**.
2. Tap the **Supported models** button and check whether your TV supports this feature.
3. Connect your phone and LG Smart TV to the same Wi-Fi network.
4. Select the device and enter the certificate number in your phone.

SmartShare

You can use the SmartShare feature easily in the Gallery, Music, etc.

Enjoy Content Via a Variety of Devices

You can share your phone's contents with a variety of devices. Tap the **SmartShare** icon or **Menu** icon > **SmartShare**.

Playing/Sending

- **Play**: You can play the contents via a TV, a Bluetooth speaker, etc.
- **Beam**: You can send the contents to Bluetooth- and SmartShare Beam-enabled devices.
  - **SmartShare Beam**: Allows for a fast transfer of contents via Wi-Fi Direct.

Setting the alarm

1. From the Home screen, tap the **Apps Key** and tap **Clock**.
2. To add a new alarm, tap the **Alarms** tab (if necessary).
3. Tap and set the alarm time.
4. Set any desired options and tap **Save**.

NOTE: When viewing the alarms screen, tap the **Menu** icon > **Settings** to adjust the alarm settings.

Using the calculator

1. From the Home screen, tap the **Apps Key** and tap **Calculator**.
2. Tap the number keys to enter numbers.
3. For simple calculations, tap the function you want , followed by .

NOTE: For more complex calculations, tap the **Menu** icon , then tap **Scientific calculator**.

Adding an event to your calendar

1. From the Home screen, tap the **Apps Key** and tap **Calendar**.
2. To view an event, tap the date. The events occurring on that date are displayed below the Calendar in Month view. Tap the event to view its details. If you want to add an event, tap at the top right corner of the Calendar.
3. Tap the **Event name** field and enter the event name. Check the date and enter the start and end time you want your event to begin and finish.
4. Tap the **Location** field to enter the location.
5. To add a note to your event, tap the **Description** field and enter the details.
6. Set any other desired options.
7. Tap **Save** to save the event in the calendar. The event name will be displayed on the date of the event. An alarm will sound at the event start time if you set it.

Changing your calendar view

1. From the Home screen, tap the **Apps Key** and tap **Calendar**.
2. At the top of the Calendar, tap and choose from **Day, Week, Month, Year, Agenda.**

Tasks

The Tasks application can be synchronized with your MS Exchange account. You can create a task, revise it, and delete it using your phone, or from MS Outlook or MS Office Outlook Web Access.

To Synchronize MS Exchange

1 From the Home screen, tap the **Apps Key** > **Settings** > **General** tab.

2 Tap **Accounts & sync** > **Add account**.

3 Tap **Microsoft Exchange**, then sign-in using your email address and password.

4 Checkmark the **Sync Tasks** checkbox.

The Web

Browser

The Browser gives you a fast, full-color world of games, music, news, sports, entertainment, and much more, right on your mobile phone.

NOTE: Additional charges apply when connecting to these services and downloading content. Check data charges with your network provider.

Using options

Tap the **Menu** icon to view the following options:

Back - Allows you to go back to the previously visited web page.

Forward - Allows you to go one page forward (if you had gone back to previous pages).

New tab - Opens a new tab.

Bookmarks - Allows you to view, add, edit, and delete your bookmarks.

Add to bookmarks - Allows you to bookmark the current web page.

Share - Allows you send the web address (URL) of the web page to others.

Find on page - Allows you to search for text on the web page.

Desktop view - Allows you to change the current mobile page to a desktop page.

Save for offline reading - Allows you to save the current page for offline reading.

Capture plus - Allows you to capture the current web page from top to bottom without cutting.

Print - Allow you to print the web page using any printers on the network. You can also save the web page as a pdf file.

Settings - Opens the Browser settings.

TIP!

To return to the previous web page, tap the **Back Key**.

Adding bookmarks

1 When viewing the page you want to save, tap the **Menu** icon > **Add to bookmarks**.

2 Enter the desired information for **Label, Address,** and **Add to** (location to save bookmark) and tap **OK**.

Changing the Browser settings

1 Open the Browser and tap the **Menu** icon > **Settings**.

2 Set any of the available options.

Settings

The Settings application contains most of the tools for customizing and configuring your phone. All of the settings in the Settings application are described in this section.

To open the Settings application

- From the Home screen, tap the **Apps Key** > **Settings** .

Networks tab

Airplane mode

Airplane mode allows you to quickly turn off all wireless connections.

1 From the Home screen, tap > > **Settings**.

2 Select the **Networks** tab.

3 Tap the **Airplane mode** switch to turn it on.

4 Tap the switch again to turn it off.

OR

1 Press and hold the **Power/Lock Key** and tap **Turn on Airplane mode**.

2 Press and hold the **Power/Lock Key** and tap **Turn off Airplane mode** to turn it off.

Wi-Fi

To use Wi-Fi on your phone, you need access to a wireless access point, or "hotspot." Some access points are open and you can simply connect to them. Others are hidden or implement other security features, so you must configure your phone in order to connect to them.

Turn on Wi-Fi

From the Home Screen, open the Notifications panel and tap to turn Wi-Fi on. A blue colored icon indicates that Wi-Fi is on.

OR

Settings

From the Home screen, tap > > **Settings** > **Networks** tab. Then tap the **Wi-Fi** switch to turn it on.

To connect to a Wi-Fi Network

Turn off Wi-Fi when you're not using it to extend the life of your battery.

1 From the Home screen, tap > > **Settings** > **Networks** tab > **Wi-Fi**.

2 Tap the **Wi-Fi** switch to turn it on and begin scanning for available Wi-Fi networks.

- A list of available Wi-Fi networks will be displayed. Secured networks are indicated by a lock icon .

3 Tap a network to connect to it.

- If the network is open, you are prompted to confirm that you want to connect to that network by tapping **Connect**.
- If the network is secured, you are prompted to enter a password or other credentials. (Ask your network administrator for details).
- Tap the **Menu** icon to access the following options.
- **Connect by WPS button**: Set up a connection to a WPS (Wi-Fi Protected Setup) router or other equipment.
- **Connect by WPS PIN**: View the PIN used by your device to set up a PIN-secured connection to a Wi-Fi router or other equipment.
- **Add network**: Add additional networks by entering SSID and other settings.
- **Wi-Fi Direct**: Connect to other Wi-Fi Direct devices.
- **Advanced Wi-Fi**: Configure additional settings.
- **Interactive tutorial**: Learn about setting up and using Wi-Fi networks, and other settings.

4 The Status Bar at the top of your screen will display an icon that indicates your Wi-Fi status.

TIP!

If you are not in range of a Wi-Fi network and use a network connection. Additional data charges may apply.

NOTE:

- Access to the Internet and a wireless router required. As an added convenience, T-Mobile has shipped certain smartphones with Wi-Fi enabled as a default setting. Leaving Wi-Fi enabled when not connected to a Wi-Fi network may affect battery charge. Qualifying data plan required.
- This device supports WEP, WPA/WPA2-PSK and 802.1x EAP. (Some EAP methods are not supported.) If your Wi-Fi service provider or network administrator sets encryption for network security, enter the key in the pop-up window. If encryption is not set, this pop-up window will not be shown. You can obtain the key from your Wi-Fi service provider or network administrator.

Bluetooth

Bluetooth is a short-range communications technology that allows you to connect wirelessly to a number of Bluetooth devices, such as headsets and hands-free car kits, and Bluetooth-enabled handhelds, computers, printers, and wireless devices. The Bluetooth communication range is usually up to approximately 30 feet.

Turn on Bluetooth

From the Home screen, tap > > **Settings** > **Networks** tab, then tap the **Bluetooth** switch to turn on the Bluetooth functionality.

To make your phone visible to other devices

1. From the Home screen, tap > > **Settings** > **Networks** tab > **Bluetooth**.
2. Make sure Bluetooth is turned on.
3. Tap the checkbox next to the device name. Visibility is set to 2 minutes by default.

NOTE: To change the visibility time length, tap the **Menu** icon > **Visibility timeout**. Choose from **2 min, 5 min, 1 h,** or **Never time out**.

To scan other Bluetooth devices

1 Access the Bluetooth menu and make sure that it is on.

2 Tap **Search for devices**.

NOTE: To find other devices, place them in discoverable mode.

Pairing Bluetooth devices

1 Access the Bluetooth menu and make sure that it is on.

2 Tap **Search for devices**. Your device will display a list of discovered in-range Bluetooth devices.

3 Tap the device you want to pair from the list.

4 Tap **Pair** or enter the passkey if needed.

NOTE: Pairing between two Bluetooth devices is a one-time process. Once a pairing has been created, the devices will continue to recognize their partnership and exchange information.

TIP!
Please consult documentation included with Bluetooth device for information on pairing mode and passcode (typically 0 0 0 0 – four zeroes).

How to send data from your phone via Bluetooth

You can send data via Bluetooth by running a corresponding application, not from the Bluetooth menu.

- **Sending pictures:** Open the **Gallery** application and tap a picture. Then tap > **Bluetooth.** Check the devices if Bluetooth is turned on. Then tap the device you want to send data to from the list.
- **Sending contacts:** Open the **Contacts** application. Tap the contact you want to share, then tap the **Menu** icon > **Share** > **Bluetooth**. Check if Bluetooth is turned on and tap **Search for devices**. Then tap the device you want to send data to from the list.

TIP!

- The supported Bluetooth version is Bluetooth 4.0 and certified by Bluetooth SIG. It is compatible with other Bluetooth SIG certified devices.
- Due to different specifications and features of other Bluetooth-compatible devices, display and operations may be different, and functions such as transfer or exchange may not be possible with all Bluetooth compatible devices.
- Supported profiles are HFP/HSP, A2DP, AVRCP, OPP, FTP(Server), HID, PAN, MAP and PBAP.

To switch between a Bluetooth headset and the phone

When a Bluetooth headset is paired and connected to your phone, you can conduct calls on the headset for hands-free conversation. During a call, you can opt to use the Bluetooth headset or just the phone. When using the Bluetooth headset during a call, the Ongoing Call notification icon is blue in the Status Bar (the icon is green when using the phone).

NOTE: Tap the Bluetooth button to switch the call from the phone to the Bluetooth device, or vice versa.

Mobile data

You can select whether to enable or disable mobile data. You can check the current data usage, set to enable/disable mobile data, or set the mobile data limit.

Mobile data - Tap the switch

to enable mobile data.

Limit mobile data usage - Checkmark to set the mobile data usage limit.

Data usage cycle - Allows you to change the data usage cycle to display in the graph.

NOTE: Tap an application to view data usage information.

Call

Configure phone call settings such as call forwarding and other special features offered by your carrier.

Voice Mail – Allows you to select your carrier's voicemail service.

Wi-Fi Calling

Important!

Wi-Fi Calling requires that you use the SIM card that is shipped with your phone. Also, you must register your address for 9-1-1. Wi-Fi Calling will not work until you have registered for 9-1-1 by logging into your account at **www.T-Mobile.com**. Go to your profile and click **Customer Info** and continue on to enter your address.

Fixed dialing numbers – Turn on and compile a list of numbers that can be called from your phone. You'll need your PIN2, which is available from your operator. Only numbers within the fixed dial list can be called from your phone.

Incoming voice call pop-up – Displays an incoming call pop-up when an all is in use.

Call reject – Allows you to set call rejection and manage the reject list.

Decline with message – When you want to reject a call, you can send a quick message instead. This is useful if you need to reject a call during a meeting. This menu allows you to manage the messages you can send.

Privacy keeper – Hides the caller name and number for an incoming call.

Call forwarding – Allows you to set the call forwarding options.

Auto answer – Sets the time before a connected hands-free device automatically answers an incoming call. Choose from **Off, 1 sec, 3 sec,** and **5 sec**.

Connection vibration – Vibrates your phone when the other party answers the call.

TTY mode – Allows you to activate TTY mode.

Hearing aids – Allows you to turn on hearing aid compatibility.

Voice enhancement – Allows you to suppress background noise during a call.

Power key ends call – Allows you to end the call by pressing the Power/Lock Key.

Call barring – Tap to lock incoming and/or outgoing international calls.

Call duration – View the duration of calls including Last call, All calls, Outgoing calls and Incoming calls.

Additional settings – Allows you to change the following settings:

Caller ID: Allows you to set the call forwarding options.

Call waiting: If call waiting is activated, the handset will notify you of an incoming call while you are on a call (depending on your network provider).

Share & connect

Allows you to transfer data and media with other devices.

NFC

NFC (Near Field Communication) is a wireless technology that enables data transmission between two objects when they are brought within a few inches of each others. When you enable NFC on your phone, your phone can exchange data with other NFC-enabled devices or read information from smart tags embedded in posters, stickers, and other products.

To turn on NFC:

1 From the Home screen, tap > > **Settings** > **Networks** tab.

2 Tap **Share & connect** and tap the **NFC** switch .

Android Beam

When this feature is turned on, you can beam app content to another NFC-capable device by holding the devices close together. For example, you can beam Browser pages, YouTube videos, contacts, ThinkFree Viewer, and more. Just bring the devices together (typically back to back) and then touch your screen. The app determines what gets beamed.

To activate Android Beam:

From the Home screen, tap > > **Settings** > **Networks** tab > **Share & connect** > **Android Beam** .

NOTE: You must enable NFC to activate Android Beam.

SmartShare Beam

Allows you to receive multimedia content from LG phones or tablets.

To activate SmartShare Beam:

From the Home screen, tap > > **Settings** > **Networks** tab > **Share & connect** > **SmartShare Beam**. Then tap the switch to activate SmartShare Beam and set the desired options.

NOTE: You must enable Wi-Fi to activate SmartShare Beam.

Media server

Share media content with nearby devices via DLNA.

1. From the Home screen, tap > > **Settings** > **Networks** tab > **Share & connect**.
2. Tap **Media server** and checkmark the **Content sharing** checkbox to allow nearby devices to access your content.

Miracast

You can mirror phone screen and sound onto LG Miracast dongle or TV wirelessly.

1. From the Home screen, tap > > **Settings**.
2. Tap the **Networks** tab.
3. Tap **Share & connect** > **Miracast**.
4. Tap the switch to turn on the feature.
5. Turn on the Miracast feature on your TV or connect to the LG Miracast dongle.

TIP!
To start the Miracast feature quickly, tap the Miracast icon in the Notification Panel. While mirroring, Mobile Hotspot cannot be used simultaneously.

LG PC Suite

Refer to page 104 for more information.

Tethering & networks

Allows you to configure mobile networks, tethering, and VPNs (Basic VPN, LG VPN).

USB tethering

You can share your phone's data connection with a computer by turning on USB tethering.

To share your phone's data connection via USB cable:

1. Connect your phone to your PC with a USB cable.
2. From the Home screen, tap > > **Settings** > **Networks** tab > **Tethering & networks**.
3. Tap the USB tethering switch to activate it. Then tap **OK** to confirm.

NOTE: You cannot access your phone's internal memory on your computer when using USB tethering.

Mobile HotSpot

You can also use your smartphone to provide a mobile broadband connection for up to 8 other devices. Create a hotspot and share your connection. To create a portable hotspot, from the Home screen, tap > > **Settings** > **Networks** tab > **Tethering & networks** > **Mobile HotSpot**. Then tap the **Mobile HotSpot** switch to activate the feature. Tap **Configure Mobile HotSpot** to change the SSID, password, security type, and other hotspot options.

NOTE: Mobile Hotspots requires an appropriate data plan. Devices connected to your Mobile Hotspot use data from your data plan. Plans are not unlimited and significant charges may be incurred if the included data allowance is exceeded. Performance may vary depending on the number of devices connected and other factors. If you do not use a password, others will be able to use your Mobile Hotspot connection.

Help

Tap to view help information on the USB tethering and Mobile Hotspot functions.

Wi-Fi Calling

Refer to page 86 for Wi-Fi calling.

Mobile networks

You can set whether to enable or disable data access on your phone.

Data enabled - Select whether to enable or disable data access.

Data roaming - Select whether to enable or disable data access while roaming.

Network mode - Allows you to choose your preferred network mode.

Access point names - You can select the access point name, add a new APN, or reset to default.

Use only 2G networks - Select to only use 2G networks.

Network operators - Allows you to select a network operator (if necessary).

VPN

From your phone, you can add, set up, and manage virtual private networks (VPNs) that allow you to connect and access resources inside a secured local network, such as your corporate network.

Prepare Your Device for VPN Connection

Depending on the type of VPN you are using at work, you may be required to enter your login credentials or install security certificates before you can connect to your company's local network. You can get this information from your network administrator. Before you can initiate a VPN connection, you must set the screen lock option (Pattern, PIN, or Password only).

Add a Basic VPN Connection

1 From the Home screen, tap > > **Settings**.

2 Select the **Networks** tab.

3 Tap **Tethering & networks** > **VPN** > **Basic VPN** > **Add Basic VPN network**.

NOTE: You must change your screen lock before you use credential storage. You can set a pattern, PIN, or password.

4 Enter the VPN network according to the security details you have obtained from your network administrator.

5 When finished, tap **Save**.

Add a LG VPN Connection

1 From the Home screen, tap > > **Settings**.

2 Select the **Networks** tab.

3 Tap **Tethering & networks** > **VPN** > **LG VPN** > **Add LG VPN network**.

NOTE: You must set the local key store password before you use LG VPN credential storage.

4 Enter the VPN network according to the security details you have obtained from your network administrator.

5 When finished, tap **Save**.

Sound tab

Sound profile

Allows you to set the sound profile to **Sound, Vibrate only,** or **Silent**.

Volumes

Adjust the phone's volume settings to suit your needs and your environment.

Vibrate strength

Allows you to set the vibrate strength for calls, notifications, and touch feedback.

Quiet mode

Tap the switch to enable this function. Tap the **Quiet mode** menu title to open a screen to set the days and times to automatically turn off all sounds except for alarms and media and to set allowed calls during the quiet mode.

Ringtone

Select the ringtone for incoming calls.

Notification sound

Select the ringtone for notifications such as new messages receipt or calendar events.

Ringtone with vibration

Checkmark for vibration feedback for calls.

Vibration Type

Allows you to set a vibration type for notifications.

Vibrate on tap

Vibrate when tapping the Home touch buttons and during other UI interactions.

Sound effects

This menu lets you select whether you hear tones when touching numbers on the dial pad, selecting on-screen options, and more.

Message/call voice notifications

Allows the device to read out the incoming call and the message event automatically.

Display tab

Home screen

Select Home - Select the desired Home theme. Choose from **Home** (standard Android layout) or **EasyHome** (simplified version for users less familiar with Android navigation).

Smart Bulletin - Include an additional home screen showing customized info.

Wallpaper - Allows you to set the Home screen wallpaper.

Screen swipe effect - Choose the desired type of effect to display when you swipe from one Home screen canvas to the next.

Allow Home screen looping - Allows you to select the type of effect to display when you swipe from one Home screen canvas to the next.

Home backup & restore - Select to backup and restore app/widget configurations.

Help - Touch to get information on using the Home screen of your device.

Lock screen

Select screen lock - Select the desired option to secure your phone from the below.

None - No lock screen.

Swipe - Swipe any part of the screen to unlock screen.

Face Unlock - Unlocks the screen through facial recognition. Follow the prompts. You are asked to select Pattern and/or PIN as a backup.

Knock Code - The Knock Code feature allows you to create your own unlock code using a combination of knocks on the screen. You can access the Home screen directly when the screen is off by tapping the same sequence on the screen.

Pattern - Allows you to set a pattern as your screen lock. It's recommended that you enter a backup PIN as well in case you forget the pattern.

PIN - Enter a numeric PIN to unlock the screen.

Password - Enter a password to unlock the screen.

Screen swipe effect - Select the screen effect you want to use when unlocking the screen.

Wallpaper - Select the wallpaper to display for your lock screen.

Widgets - Allows you to display widgets on the lock screen.

Missed calls & new messages - Shows notifications of missed calls and new messages on the Lock screen.

Shortcuts - Customize shortcuts on the lock screen.

1. From the Home screen, tap > > **Settings** > **Display** tab > **Lock screen** > **Shortcuts**.
2. Tap the icon you want to replace and select the app you want to replace it with.
3. Tap **Save**.

Weather animation - Show weather animation for current location or primary city set in the Weather app.

Contact info for lost phone - Select whether to display the owner information on the lock screen and customize the owner information.

Lock timer - Allows you to set the amount of time before the screen automatically locks after the screen has timed-out.

Power button instantly locks - Checkmark to instantly lock the screen when the **Power/Lock Key** is pressed.

Home touch buttons

Select the front touch button combination, color and if you want to use a transparent background.

Font type

Select the desired font type.

Font size

Select the desired font size.

Brightness

Adjust the screen brightness by using the slider. Tap **Auto** to set the brightness to automatically change.

Notification LED

Select which type of notifications display the notification LED.

Auto-rotate screen

Set to switch orientation automatically when you rotate the phone.

Screen timeout

Set the time delay before the screen automatically turns off.

Smart screen

Checkmark this option to keep screen on when the phone detects your face looking at the screen.

Screen-off effect

Set the screen off effect used when the screen turns off.

Daydream

Select the screensaver to display when the phone is sleeping while docked and/or charging.

General tab

Language & input

Select the language for the text on your phone and for configuring the on-screen keyboard, including words that you've added to its dictionary.

Language - Choose a language to use on your phone.

Default - Allows you to select the default keyboard type.

Checkmark the keyboard you want to use from **Google voice typing** and **LG Keyboard**. Tap to configure each keyboard's settings.

Voice Search - Touch to configure the Voice Search settings.

Text-to-speech output - Touch to set the preferred engine or general settings for text-to-speech output.

Pointer speed - Adjust the pointer speed.

Location

Turn on location service, your phone determines your approximate location using Wi-Fi and mobile networks. When you select this option, you're asked whether you consent to allowing Google to use your location when providing these services.

Accounts & sync

Use the Accounts & sync settings menu to add, remove, and manage your Google and other supported accounts. You also use these settings to control how and whether all applications send, receive, and sync data on their own schedules and whether all applications can synchronize user data automatically. Gmail™, Calendar, and other applications may also have their own settings to control how they synchronize data; see the sections on those applications for details. Touch **Add account** to add new account.

Cloud

Register and add cloud account to quickly and easily use cloud service on LG apps.

NOTE:

If the mobile network is enabled, additional charges may apply, depending on your plan.

Accessibility

Use the Accessibility settings to configure any accessibility plug-ins you have installed on your phone.

NOTE: Requires additional plug-ins to become selectable.

TalkBack - Allows you to set up the TalkBack function which assists people with impaired vision by providing verbal feedback. Tap the switch OFF ON the top right corner of the screen to turn it on. Tap **Settings** at the bottom of the screen to adjust the TalkBack settings.

Font size - Select the desired font size.

Invert colors - Increases the color contrast for people with difficulty perceiving color.

Color adjustment - Allows you to view the screen with greater color contrast. Tap the switch OFF ON at the top right corner of the screen to turn it on. Then tap the screen and drag across the screen in any direction until you see the color contrast you want to use.

Touch zoom - When this feature is turned on, you can zoom in and out by triple-tapping the screen.

Message/call voice notifications - Announces incoming calls and messages out loud.

Screen shades - Dims the screen's backlight.

Accessibility shortcut - Open accessibility options quickly on any screen.

Text-to-speech output - Text-to-speech output provides audible readout of text, for example, the contents of text messages, and the Caller ID for incoming calls.

Audio type - Checkmark to change the sound to **Mono** or **Stereo**.

Sound balance - Allows you to manually adjust the sound direction.

Notification LED - Turn on the LED light for incoming calls and notifications.

Flash alerts - The flash will blink for incoming calls and notifications.

Call reject message - Send a message customized for those with hearing impairments when an call is rejected.

Turn off all sounds - Activate to turn off all sounds.

Captions - Allows customized caption settings for those with hearing impairments.

Touch feedback time - Sets the touch and hold delay (short, medium, or long).

Universal touch - Tap the switch to toggle it on and off. On allows you to replace the hardware keys with a Universal touch board. Tap the Universal touch icon to access the Power, Home, Volume down, Volume up, and Pinch buttons. Draw a "C" on the board to automatically display the Dial tab. Draw an "M" on the board to automatically display the Messaging application. Draw a "W" on the board to automatically launch the Chrome application.

Screen timeout - Set the desired screen timeout.

Touch control areas - Limit touch control to selected areas of the screen. Press the Volume Down Key and Home Key at the same time to activate and deactivate this feature.

Auto-rotate screen - Checkmark to allow the device to rotate the screen depnding on the device orientation (portrait or landscape).

Password voice confirmation - Checkmark so that the device reads out passwords as your enter them.

Power key ends call - Checkmark so that you can end voice calls by pressing the Power/Lock Key. When this option is enabled, pressing the Power/Lock Key during a call does not lock the screen.

Accessibility settings shortcut - Turning this feature on allows you to activate an accessibility feature by tapping the **Home Key** three (3) times. Choose from **Off, Show all, TalkBack, Invert colors, Universal touch,** and **Accessibility settings**.

One-touch input - Checkmark so that each finger touch enters a letter/character on the LG Keyboard.

One-handed operation

Allows you to adjust the position of the dial keypad, LG keyboard, or lock screen to the left or right side of the screen to easily use it with one hand.

Dial keypad - Checkmark to adjust the position of the dial keypad.

LG keyboard - Checkmark to adjust the position of the LG keyboard.

Lock screen - Checkmark to adjust the position of the the PIN entry.

Help - Displays help information for each available option.

Shortcut key

Get quick access to apps by pressing and holding the Volume Keys when the screen is off or locked.

Volume Up Key: To access QuickMemo+.

Volume Down Key: To access the Camera.

Security

Use the Security menu to configure how to help secure your phone and its data.

Content lock - Select lock types to lock files in Gallery and QuickMemo+.

Encrypt phone - Allows you to encrypt data on the phone for security. You will be required to enter a PIN or password to decrypt your phone each time you power it on.

Encrypt SD card storage - Encrypt SD card storage and keep data unavailable for other devices.

Set up SIM card lock - Allows you to set if you want to require a PIN to use or, if set, allows you to change the PIN.

Password typing visible - Checkmark to briefly show each character of passwords as you enter them so that you can see what you enter.

Phone administrators - Add or remove phone administrators.

Unknown sources - Allow installation of non-Play Store applications.

Verify apps - Disallow or warn before installation of apps that may cause harm.

Notification access - Your device will be able to read all notifications posted by the system or and installed app, which may include personal information such as contact names and the text of messages sent to you.

Storage type - Displays the storage type for credentials.

Trusted credentials - Checkmark to allow applications to access your phone's encrypted store of secure certificates and related passwords and other credentials. You use credential storage to establish some types of VPN and Wi-Fi connections. If you have not set a password for the secure credential storage, this setting is dimmed.

Install from storage - Touch to install a secure certificate.

Clear credentials - Deletes all secure certificates and related credentials and erases the secure storage's own password.

Guest mode

Use Guest mode when you let someone else use your phone. They will only be able to use the applications that you've selected. Once you set it up, you can easily put your phone in Guest mode by drawing the guest screen lock on the Lock screen that you set, which is different from your normal screen lock.

NOTE: To use Guest mode, set the Lock screen to Knock Code, Pattern, PIN, or Password. Guest can also use apps not pre-selected but linked to pre-selected apps.

Gestures

Answer an incoming call - During an incoming call, bring the phone to your ear to accept the incoming call.

NOTE: If the proximity sensor is covered by something, the device might perform an incorrect action.

Fade out ringtone - During an incoming call, pick up the phone from the flat surface to fade out the ringtone.

NOTE: If proximity sensor is covered by something, the device might perform an incorrect action.

Silence incoming calls - Flip the device to silence incoming calls.

Snooze or stop alarm - Flip the device to snooze or stop the alarm.

Pause video - Flip the device to pause the video.

Help - Touch to get information on using the Gesture functions of your device.

Motion sensor calibration - Improve the accuracy of the tilt and speed of the sensor.

QuickCircle case

This menu allows you to select apps to be used directly on the cover in small view using QuickCircle. Keep in mind that turning on these QuickCircle case settings may result in irregular device behavior.

Dual window

This feature allows you to view two apps at the same time. Touch and hold the **Back Key** to access this feature.

1. Tap > > **Settings** > **General** tab > **Dual window**.
2. Tap the **Split view** checkmark to set this feature on.(A blue checkmark will appear.)
3. Tap the switch to activate the Dual window feature

Date & time

Set your preferences for how the date and time is displayed.

Storage

You can monitor the used and available internal memory in the device.

Battery

See how much battery power is used for device activities. The battery level displays in a percentage. The remaining time of use is also displayed.

Battery percentage on status bar - Checkmark to display the battery percentage on the Status Bar.

Battery saver

Tap the switch to turn this feature on or off. Tap **Battery saver** for the following options.

Turn Battery saver on: Select the level at which you want to turn on the Battery saver function.

Auto-sync: Turns off Auto-sync.

Wi-Fi: Turns off Wi-Fi if data is not in use.

Bluetooth: Turns off Bluetooth if it's not connected to a device.

Vibrate on tap: Turns off touch feedback.

Brightness: Adjusts the brightness.

Screen timeout: Adjusts the screen timeout.

Notification LED: Turns off the notification LED.

Help - Tap to access information about the items that can be enabled/disabled with the Battery saver feature.

Smart cleaning

Allows you to manage unused apps and data.

1 Tap > > **Settings** > **General** tab > **Smart cleaning**.

2 Tap the data you want to remove, then tap **Clean**.

Apps

You use the Apps settings menu to view details about the applications installed on your phone, manage their data, or force them to stop. Tap the **DOWNLOADED, ON SD CARD, RUNNING** or **ALL** tabs to view information about your installed apps.

Default message app

This menu allows you to choose what messaging app to use as your default messaging app.

Backup & reset

Back up my data - Back up app data, Wi-Fi passwords, and other settings to Google servers.

Backup account - Displays the account that is currently being used to back up information.

Automatic restore - When reinstalling an app, restore backed up settings and data.

Collect diagnostics - Allows the collection of diagnostic data for troubleshooting.

LG Backup service - Backs up all information on the device and restores it in the event of data loss or replacement.

Factory data reset - Erases all data on the phone, except as follows. In the event of device failure or error, your device may record in an error log information about the device's status at the time of the error event. The information recorded in the error log may include data about application names and usage, cell phone location and number, GPS status, memory usage and other non-personal device status information. This information is stored on your phone, and can only be accessed by LG if the phone is physically returned to LG for repair and service. The error log information is used by LG only to diagnose, repair, and improve LG's products and services.

Printing

Allows you to print the content of certain screens (such as web pages displayed in Chrome) to a printer connected to the same Wi-Fi network as your Android device.

About phone

View legal information, check phone status and software versions, and perform a software update.

LG PC Suite

For Windows OS

LG PC Suite helps you manage media contents and applications in your phone by allowing you to connect to your phone to your PC.

With the LG PC Suite software, you can...

- Manage and play your media contents (music, movie, pictures) on your PC.
- Send multimedia contents to your device.
- Synchronizes data (schedules, contacts, bookmarks) in your device and PC.
- Backup the applications in your device.
- Update the software in your device.
- Play multimedia contents of your PC from other device

* Some functions may not be available, depending on the model.

NOTE: You can use the Help menu from the application to find out how to use the LG PC Suite software.

Installing the LG PC Suite Software

To download the LG PC Suite software, please do the following:

1. Go to www.lg.com/us.
2. Go to **SUPPORT** > **MOBILE SUPPORT** > **PC Sync**.
3. Select the model information and click **GO**.
4. Scroll down, select the **PC Sync** tab > **Windows** > **DOWNLOAD** to download LG PC Suite.

System Requirements for LG PC Suite software

- OS: Windows XP (Service pack 3) 32bit, Windows Vista, Windows 7, Windows 8
- CPU: 1 GHz or higher processors
- Memory: 512 MB or higher RAMs
- Graphic card: 1024 x 768 resolution, 32 bit color or higher
- HDD: 500 MB or more free hard disk space (More free hard disk space may be needed depending on the volume of data stored.)

- Required software: LG United drivers, Windows Media Player 10 or later.

NOTE: LG United USB Driver
The LG United USB driver is required to connect an LG device and PC. It is installed automatically when you install the LG PC Suite software application.

For Mac OS

With the LG PC Suite software, you can...

- Manage and play your media contents (music, movie, pictures) on your PC.
- Send multimedia contents to your device.
- Synchronizes data (schedules, contacts, bookmarks) in your device and PC.

* Some functions may not be available, depending on the model.

NOTE: You can use the Help menu from the application to find out how to use the LG PC Suite software.

Installing the LG PC Suite Software

To download the LG PC Suite software, please do the following:

1. Go to www.lg.com/us.
2. Go to **SUPPORT** > **MOBILE SUPPORT** > **PC Sync**.
3. Select the model information and click **GO**.
4. Scroll down, select the **PC Sync** tab > **Mac OS** > **DOWNLOAD** to download LG PC Suite.

System Requirements for LG PC Suite software

- OS: Mac OS X (10.6.8) or higher
- Memory : 2GB RAM or higher
- Graphics card: 1024 x 768 screen resolution or higher and 32-bit color
- Hard disc: Storage of 500 MB or higher (Additional space may be required for data)

LG PC Suite

- Required software: LG United Mobile driver

NOTE: LG Integrated USB Driver

The LG integrated USB driver is required to connect an LG device and PC. It is installed automatically when you install the LG PC Suite software application.

Phone software update

This feature allows you to update the firmware of your phone to the latest version conveniently from the internet without the need to visit a service center. For more information on how to use this function, please visit:
http://www.lg.com
As the mobile phone firmware update requires the user's full attention for the duration of the update process, please make sure to check all instructions and notes that appear at each step before proceeding. Please note that removing the USB cable or battery during the upgrade may seriously damage your mobile phone.

LG Mobile Phone Software update via Over-the-Air (OTA)

This feature allows you to update the firmware of your phone to the newer version conveniently via OTA without connecting the USB data cable. This feature is only available if and when LG makes the newer version of the firmware available for your device. First, you can check the software version on your mobile phone:
From the Home screen, tap > > **Settings** > **General** tab > **About phone** > **Software information**.
To perform the phone software update, from the Home screen, tap > > **Settings** > **General** tab > **About phone** > **Update Center** > **System updates** > **Check now.**

NOTE: LG reserves the right to make firmware updates available only for selected models at its own discretion and does not guarantee the availability of the newer version of the firmware for all handset models.

Phone software update

NOTE: Your personal data—including information about your Google account and any other accounts, your system/application data and settings, any downloaded applications and your DRM licence —might be lost in the process of updating your phone's software. Therefore, LG recommends that you back up your personal data before updating your phone's software. LG does not take responsibility for any loss of personal data.

Trademarks

- Copyright 2014 LG Electronics, Inc. All rights reserved. LG and the LG logo are registered trademarks of LG Group and its related entities.
- Bluetooth® is a registered trademark of the Bluetooth SIG, Inc. worldwide.
- Wi-Fi®, the Wi-Fi CERTIFIED logo, and the Wi-Fi logo are registered trademarks of the Wi-Fi Alliance.
- All other trademarks and copyrights are the property of their respective owners.

DivX HD

ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX, LLC, a subsidiary of Rovi Corporation. This is an official DivX Certified® device that has passed rigorous testing to verify that it plays DivX video. Visit divx.com for more information and software tools to convert your files into DivX videos.

ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.

DivX Certified® to play DivX® video up to HD 720p, including premium content.

DivX®, DivX Certified® and associated logos are trademarks of Rovi Corporation or its subsidiaries and are used under license.

NOTICE: Open Source Software

To obtain the corresponding source code under GPL, LGPL, MPL and other open source licences, please visit http://opensource.lge.com. All referred licence terms, disclaimers and notices are available for download with the source code.

- Wi-Fi® and Wi-Fi Protected Access®are registered trademarks of the Wi-Fi Alliance.

Trademarks

Dolby Digital Plus

Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

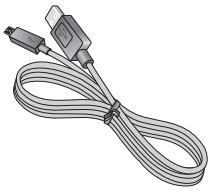
Accessories

These accessories are available for use with your phone. (Items described below may be optional and sold separately.)

Travel adapter

USB cable

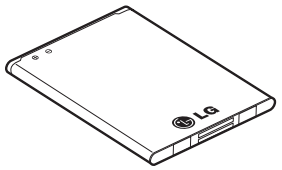
Connect your phone and PC.



User Guide

Learn more about your phone.

Battery



NOTE:

- Always use genuine LG accessories. Failure to do this may void your warranty.
- Accessories may vary in different regions.

Troubleshooting

This section lists some problems you might encounter when using your phone. Some problems require you to call your service provider, but most are easy to fix yourself.

Message	Possible causes	Possible corrective measures
Micro SIM error	There is no Micro SIM card in the phone or it is inserted incorrectly.	Make sure that the Micro SIM card is correctly inserted.
No network connection/ Dropped network	Signal is weak or you are outside the carrier network.	Move toward a window or into an open area. Check the network operator coverage map.
	Operator applied new services.	Check whether the Micro SIM card is more than 6~12 months old. If so, change your Micro SIM at your network provider's nearest branch. Contact your service provider.
Codes do not match	To change a security code, you will need to confirm the new code by re-entering it.	If you forget the code, contact your service provider.
	The two codes you have entered do not match.	

Message	Possible causes	Possible corrective measures
No applications can be set	Not supported by service provider or registration required.	Contact your service provider.
Calls not available	Dialling error	New network not authorized.
	New Micro SIM card inserted.	Check for new restrictions.
	Pre-paid charge limit reached.	Contact service provider or reset limit with PIN2.
Phone cannot be switched on	Power/Lock Key pressed too briefly.	Press the Power/Lock Key for at least two seconds.
	Battery is not charged.	Charge battery. Check the charging indicator on the display.

Troubleshooting

Message	Possible causes	Possible corrective measures
Charging error	Battery is not charged.	Charge battery.
	Outside temperature is too hot or cold.	Make sure phone is charging at a normal temperature.
	Contact problem	Check the charger and its connection to the phone.
	No voltage	Plug the charger into a different socket.
	Charger defective	Replace the charger.
	Wrong charger	Use only original LG accessories.
Number not allowed	The Fixed dialling number function is on.	Check the Settings menu and turn the function off.
Impossible to receive / send text and picture messages	Memory full	Delete some messages from your phone.
Files do not open	Unsupported file format	Check the supported file formats.

Message	Possible causes	Possible corrective measures
The screen does not turn on when I receive a call.	Proximity sensor problem	If you use a protection tape or case, make sure it has not covered the area around the proximity sensor. Make sure that the area around the proximity sensor is clean.
No sound	Vibration mode	Check the settings status in the sound menu to make sure you are not in vibration or silent mode.
Hangs up or freezes	Intermittent software problem	Try to perform a software update via the website.

For Your Safety

Safety Information

Please read and observe the following information for safe and proper use of your phone and to prevent damage.

WARNING! This product contains chemicals known to the State of California to cause cancer and birth defects or reproductive harm. ***Wash hands after handling.***

Caution Violation of the instructions may cause minor or serious damage to the product.

- Do not disassemble or open crush, bend or deform, puncture or shred.
- Repairs under warranty, at LG's option, may include replacement parts or boards that are either new or reconditioned, provided that they have functionality equal to that of the parts being replaced.
- Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, expose to fire, explosion or other hazard.
- Only use the battery for the system for which it is specified.
- Only use the battery with a charging system that has been qualified with the system per this standard. Use of an unqualified battery or charger may present a risk of fire, explosion, leakage, or other hazard.
- Do not short circuit a battery or allow metallic conductive objects to contact battery terminals.
- Replace the battery only with another battery that has been qualified with the system per this standard, IEEE-Std-1725-200x. Use of an unqualified battery may present a risk of fire, explosion, leakage or other hazard.
- Promptly dispose of used batteries in accordance with local regulations.
- Battery usage by children should be supervised.
- Avoid dropping the phone or battery. If the phone or battery is dropped, especially on a hard surface, and the user suspects damage, take it to a service center for inspection.
- Improper battery use may result in a fire, explosion or other hazard.

- For those host devices that utilize a USB port as a charging source, the host device's user manual shall include a statement that the phone shall only be connected to products that bear the USB-IF logo or have completed the USB-IF compliance program.

Charger and Adapter Safety

- The charger and adapter are intended for indoor use only.
- Insert the battery pack charger vertically into the wall power socket.
- Unplug the power cord and charger during lightning storms to avoid electric shock or fire.
- Use the correct adapter for your phone when using the battery pack charger abroad.

Battery Information and Care

- Please read the manual of proper installation and removal of the battery.
- Please read the manual of specified charger about charging method.
- Do not damage the power cord by bending, twisting, or heating. Do not use the plug if it is loose as it may cause electric shock or fire.
  Do not place any heavy items on the power cord. Do not allow the power cord to be crimped as it may cause electric shock or fire.
- Unplug the power cord prior to cleaning your phone, and clean the power plug pin when it's dirty. When using the power plug, ensure that it's firmly connected. If not, it may cause excessive heat or fire. If you put your phone in a pocket or bag without covering the receptacle of the phone (power plug pin), metallic articles (such as a coin, paperclip or pen) may short-circuit the phone. Short-circuit of the terminal may damage the battery and cause an explosion. Always cover the receptacle when not in use.
- Recharge the battery after long periods of non-use to maximize battery life. Battery life will vary due to usage pattern and environmental conditions.
- Never store your phone in temperature less than -4 °F or greater than 122 °F.

For Your Safety

- Charging temperature range is between 32 °F and 113 °F. Do not charge the battery out of recommended temperature range. Charging out of recommended range might cause the generating heat or serious damage of battery. And also, it might cause the deterioration of battery's characteristics and cycle life.
- Do not use or leave the battery under the blazing sun or in heated car by sunshine. The battery may generate heat, smoke or flame. And also, it might cause the deterioration of battery's characteristics or cycle life.
- The battery pack has protection circuit to avoid the danger. Do not use near places that can generate static electricity more than 100V which could damage the protection circuit. Damaged protection circuits may generate smoke, rupture or ignite.
- When using the battery for the first time, if it emits a bad smell, you see rust on it, or anything else abnormal, do not use the equipment and bring the battery to the shop which it was bought.
- Keep batteries away from babies and small children. If children use the battery, their parents or legal guardians are responsible for supervising and teaching them about the safe handling of batteries and how to use batteries according to the manual with care.
- If liquid from the battery rubs against skin or clothing, wash with fresh water. It may cause the skin inflammation. Remove and do not use the battery. Be careful that children do not swallow any parts (such as earphone, connection parts of the phone, etc.). This could cause asphyxiation or suffocation resulting in serious injury or death.
- Do not handle the phone with wet hands while it is being charged. It may cause an electric shock or seriously damage your phone.
- Do not place or answer calls while charging the phone as it may short-circuit the phone and/or cause electric shock or fire.
- Do not use harsh chemicals (such as alcohol, benzene, thinners, etc.) or detergents to clean your phone. This could cause a fire.
- Always unplug the charger from the wall socket after the phone is fully charged to save unnecessary power consumption of the charger.

Care and Maintenance

Your mobile device is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you fulfill any warranty obligations and allow you to enjoy this product for many years:

Keep your Mobile Device away from:

Liquids of any kind

Keep the mobile device dry. Precipitation, humidity, and liquids contain minerals that will corrode electronic circuits. If the mobile device does get wet, do not accelerate drying with the use of an oven, microwave, or dryer, because this may damage the mobile device and could cause a fire or explosion.

Do not use the mobile device with a wet hand.

Doing so may cause an electric shock to you or damage to the mobile device.

Extreme heat or cold

- Avoid temperatures below 0°C / 32°F or above 45°C / 113°F.
- Use your phone in temperatures between 0°C /32°F and 40°C/104°F, if possible. Exposing your phone to extremely low or high temperatures may result in damage, malfunction, or even explosion.

Microwaves

Do not try to dry your mobile device in a microwave oven. Doing so may cause a fire or explosion.

Dust and dirt

Do not expose your mobile device to dust, dirt, or sand.

Sunscreen lotion

Do not expose or wear your device to any liquid like sunscreen lotion.

Doing so may cause your device to or damage to the mobile device.

Cleaning solutions

Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the mobile device.

Wipe it with a soft cloths lightly dampened in a mild soap-and-water solution.

Shock or vibration

Do not drop, knock, or shake the mobile device.

Rough handling can break internal circuit boards.

Paint

Do not paint the mobile device. Paint can clog the device'smoving parts or ventilation openings and prevent proper operation.

General Notice

- An emergency call can be made only within a service area. For an emergency call, make sure that you are within a service area and that the phone is turned on.
- Do not place items containing magnetic components such as a credit card, phone card, bank book, or subway ticket near your phone. The magnetism of the phone may damage the data stored in the magnetic strip.
- Talking on your phone for a long period of time may reduce call quality due to heat generated during use.
- When the phone is not used for a long period time, store it in a safe place with the power cord unplugged.
- Using the phone in proximity to receiving equipment (i.e., TV or radio) may cause interference to the phone.
- Do not use the phone if the antenna is damaged. If a damaged antenna contacts skin, it may cause a slight burn. Please contact an LG Authorized Service Center to replace the damaged antenna.
- The data saved in your phone might be deleted due to careless use, repair of the phone, or upgrade of the software. Please backup your important phone numbers. (Ringtones, text messages, voice messages, pictures, and videos could also be deleted.) The manufacturer is not liable for damage due to the loss of data.

- When you use the phone in public places, set the ringtone to vibration so you don't disturb others.
- Do not turn your phone on or off when putting it to your ear.
- Your phone is an electronic device that generates heat during normal operation. Extremely prolonged, direct skin contact in the absence of adequate ventilation may result in discomfort or minor burns. Therefore, use care when handling your phone during or immediately after operation.

Use accessories, such as earphones and headsets, with caution. Ensure that cables are tucked away safely and do not touch the antenna unnecessarily.

Part 15.19 statement

This device complies with part 15 of FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received, including interference that may causes undesired operation.

Part 15.21 statement

Change or Modifications that are not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Part 15.105 statement

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. if this equipment does cause harmful interference or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC RF Exposure Information

WARNING! Read this information before operating the phone.

In August 1996, the Federal Communications Commission (FCC) of the United States, with its action in Report and Order FCC 96-326, adopted an updated safety standard for human exposure to Radio Frequency (RF) electromagnetic energy emitted by FCC regulated transmitters. Those guidelines are consistent with the safety standard previously set by both U.S. and international standards bodies. The design of this phone complies with the FCC guidelines and these international standards.

Bodily Contact During Operation

This device was tested for typical body-worn operations with the back of the phone kept 0.39 inches (1cm) between the user's body and the back of the phone. To comply with FCC RF exposure requirements, a minimum separation distance of 0.39 inches (1cm) must be maintained between the user's body and the back of the phone. Third-party belt-clips, holsters, and similar accessories containing metallic components may not be used. Body-worn accessories that cannot maintain 0.39 inches (1cm) separation distance between the user's body and the back of the phone, and have not been tested for typical body-worn operations may not comply with FCC RF exposure limits and should be avoided.

Caution

Use only the supplied antenna. Use of unauthorized antennas (or modifications to the antenna) could impair call quality, damage the phone, void your warranty and/or violate FCC regulations.

Don't use the phone with a damaged antenna. A damaged antenna could cause a minor skin burn. Contact your local dealer for a replacement antenna.

Consumer Information About Radio Frequency Emissions

Your wireless phone, which contains a radio transmitter and receiver, emits radio frequency energy during use. The following consumer information addresses commonly asked questions about the health effects of wireless phones.

Are wireless phones safe?

Scientific research on the subject of wireless phones and radio frequency ("RF") energy has been conducted worldwide for many years, and continues. In the United States, the Food and Drug Administration ("FDA") and the Federal Communications Commission ("FCC") set policies and procedures for wireless phones. The FDA issued a website publication on health issues related to cell phone usage where it states, "The scientific community at large ... believes that the weight of scientific evidence does not show an association between exposure to radiofrequency (RF) from cell phones and adverse health outcomes. Still the scientific community does recommend conducting additional research to address gaps in knowledge. That research is being conducted around the world and FDA continues to monitor developments in this field. You can access the joint FDA/FCC website at http://www.fda.gov (under "C" in the subject index, select Cell Phones > Research). You can also contact the FDA toll-free at (888) 463-6332 or (888) INFO-FDA. In June 2000, the FDA entered into a cooperative research and development agreement through which additional scientific research is being conducted. The FCC issued its own website publication stating that "there is no scientific evidence that proves that wireless phone usage can lead to cancer or a variety of other problems, including headaches, dizziness or memory loss."

This publication is available at http://www.fcc.gov/oet/rfsafety or through the FCC at (888) 225-5322 or (888) CALL-FCC.

What does "SAR" mean?

In 1996, the FCC, working with the FDA, the U.S. Environmental Protection Agency, and other agencies, established RF exposure safety guidelines for wireless phones in the United States. Before a wireless phone model is available for sale to the public, it must be tested by the manufacturer and

certified to the FCC that it does not exceed limits established by the FCC. One of these limits is expressed as a Specific Absorption Rate, or "SAR." SAR is a measure of the rate of absorption of RF energy in the body. Tests for SAR are conducted with the phone transmitting at its highest power level in all tested frequency bands. Since 1996, the FCC has required that the SAR of handheld wireless phones not exceed 1.6 watts per kilogram, averaged over one gram of tissue.

Although the SAR is determined at the highest power level, the actual SAR value of a wireless phone while operating can be less than the reported SAR value. This is because the SAR value may vary from call to call, depending on factors such as proximity to a cell site, the proximity of the phone to the body while in use, and the use of hands-free devices. Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model.

The highest SAR values are:

* Head: 0.42 W/kg

* Body (Body-worn/Hotspot): 1.15 W/kg

(body measurements differ among phone models, depending upon available accessories and FCC requirements).

While there may be differences between SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF emission guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/oet/ea/fccid/ after searching on FCC ID ZNFD851.

For more information about SARs, see the FCC's OET Bulletins 56 and 65 at http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins or visit the Cellular Telecommunications Industry Association website at http://www.ctia.org/consumer_info/index.cfm/AID/10371. You may also wish to contact the manufacturer of your phone.

Can I minimize my RF exposure?

If you are concerned about RF, there are several simple steps you can take to minimize your RF exposure. You can, of course, reduce your talk time. You can place more distance between your body and the source of the RF, as the exposure level drops off dramatically with distance. The FDA/FCC website states that "hands-free kits can be used with wireless phones for convenience and comfort. These systems reduce the absorption of RF energy in the head because the phone, which is the source of the RF emissions, will not be placed against the head. On the other hand, if the phone is mounted against the waist or other part of the body during use, then that part of the body will absorb more RF energy. Wireless phones marketed in the U.S. are required to meet safety requirements regardless of whether they are used against the head or against the body. Either configuration should result in compliance with the safety limit." Also, if you use your wireless phone while in a car, you can use a phone with an antenna on the outside of the vehicle. You should also read and follow your wireless phone manufacturer's instructions for the safe operation of your phone.

Do wireless phones pose any special risks to children?

The FDA/FCC website states that "the scientific evidence does not show a danger to users of wireless communication devices, including children." The FDA/FCC website further states that "some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all". For example, the Stewart Report from the United Kingdom ["UK"] made such a recommendation in December 2000. In this report a group of independent experts noted that no evidence exists that using a cell phone causes brain tumors or other ill effects. [The UK's] recommendation to limit cell phone use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists. A copy of the UK's leaflet is available at http://www.dh.gov.uk (search "mobile"), or you can write to: NRPB, Chilton, Didcot, Oxon OX11 ORQ, United Kingdom. Copies of the UK's annual reports on mobile phones and RF are available online at www.iegmp.org.uk and

http://www.hpa.org.uk/radiation/ (search "mobile"). Parents who wish to reduce their children's RF exposure may choose to restrict their children's wireless phone use.

Where can I get further information about RF emissions?

For further information, see the following additional resources (websites current as of April 2005):

U.S. Food and Drug Administration

FDA Consumer magazine
November-December 2000
Telephone: (888) INFO-FDA
http://www.fda.gov (Under "C" in the subject index, select Cell Phones > Research.)

U.S. Federal Communications Commission

445 12th Street, S.W.
Washington, D.C. 20554
Telephone: (888) 225-5322
http://www.fcc.gov/oet/rfsafety

Independent Expert Group on Mobile Phones

http://www.iegmp.org.uk

Royal Society of Canada Expert Panels on Potential Health Risks of Radio Frequency Fields from Wireless Telecommunication Devices

283 Sparks Street
Ottawa, Ontario K1R 7X9
Canada
Telephone: (613) 991-6990

World Health Organization
Avenue Appia 20
1211 Geneva 27
Switzerland
Telephone: 011 41 22 791 21 11
http://www.who.int/mediacentre/factsheets/fs193/en/

International Commission on Non-Ionizing Radiation Protection
c/o Bundesamt fur Strahlenschutz
Ingolstaedter Landstr. 1
85764 Oberschleissheim
Germany
Telephone: 011 49 1888 333 2156
http://www.icnirp.de

American National Standards Institute
1819 L Street, N.W., 6th Floor
Washington, D.C. 20036
Telephone: (202) 293-8020
http://www.ansi.org

National Council on Radiation Protection and Measurements
7910 Woodmont Avenue, Suite 800
Bethesda, MD 20814-3095
Telephone: (301) 657-2652
http://www.ncrponline.org

Engineering in Medicine and Biology Society, Committee on Man and Radiation (COMAR) of the Institute of Electrical and Electronics Engineers
http://ewh.ieee.org/soc/embs/comar/

TIA Safety Information

The following is the complete TIA Safety Information for wireless handheld phones.

Exposure to Radio Frequency Signal

Your wireless handheld portable phone is a low power radio transmitter and receiver. When ON, it receives and sends out Radio Frequency (RF) signals.

In August, 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for handheld wireless phones. Those guidelines are consistent with the safety standards previously set by both U.S. and international standards bodies:

ANSI C95.1 (1992) *
NCRP Report 86 (1986)
ICNIRP (1996)

* American National Standards Institute; National Council on Radiation Protection and Measurements; International Commission on Non-Ionizing Radiation Protection

Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. For example, over 120 scientists, engineers, and physicians from universities, government health agencies, and industry reviewed the available body of research to develop the ANSI Standard (C95.1).

The design of your phone complies with the FCC guidelines (and those standards).

Antenna Care

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the phone and may violate FCC regulations.

Phone Operation

NORMAL POSITION: Hold the phone as you would any other telephone with the antenna pointed up and over your shoulder.

Tips on Efficient Operation

For your phone to operate most efficiently:

Don't touch the antenna unnecessarily when the phone is in use. Contact with the antenna affects call quality and may cause the phone to operate at a higher power level than otherwise needed.

Electronic Devices

Most modern electronic equipment is shielded from RF signals. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone.

Pacemakers

The Health Industry Manufacturers Association recommends that a minimum separation of six (6) inches be maintained between a handheld wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research.

Persons with pacemakers:

- Should ALWAYS keep the phone more than six (6) inches from their pacemaker when the phone is turned ON;
- Should not carry the phone in a breast pocket;
- Should use the ear opposite the pacemaker to minimize the potential for interference;
- Should turn the phone OFF immediately if there is any reason to suspect that interference is taking place.

Hearing Aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may want to consult your service provider (or call the customer service line to discuss alternatives).

Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information.

Health Care Facilities

Turn your phone OFF in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may use equipment that could be sensitive to external RF energy.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle.

Posted Facilities

Turn your phone OFF in any facility where posted notices so require.

Aircraft

FCC regulations prohibit using your phone while in the air. Switch OFF your phone before boarding an aircraft.

Blasting Areas

To avoid interfering with blasting operations, turn your phone OFF when in a "blasting area" or in areas posted: "Turn off two-way radio". Obey all signs and instructions.

Potentially Explosive Atmosphere

Turn your phone OFF when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Areas with a potentially explosive atmosphere are often, but not always marked clearly. Potential areas may include: fueling areas (such as gasoline stations); below deck on boats; fuel or chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or butane); areas where the air contains chemicals or particles (such as grain, dust, or metal powders); and any other area where you would normally be advised to turn off your vehicle engine.

For Vehicles Equipped with an Air Bag

An air bag inflates with great force. DO NOT place objects, including either installed or portable wireless equipment, in the area over the air bag or in the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious injury could result.

FDA Consumer Update

The U.S. Food and Drug Administration's Center for Devices and Radiological Health Consumer Update on Mobile Phones:

1. Do wireless phones pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof, however, that wireless phones are absolutely safe. Wireless phones emit low levels of Radio Frequency (RF) energy in the microwave range while being used. They also emit very low levels of RF when in idle mode. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

2. What is the FDA's role concerning the safety of wireless phones?

Under the law, the FDA does not review the safety of radiation-emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit Radio Frequency (RF) energy at a level that is hazardous to the user. In such a case, the FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace, or recall the phones so that the hazard no longer exists.

Although the existing scientific data does not justify FDA regulatory actions, the FDA has urged the wireless phone industry to take a number of steps, including the following:

- Support needed research into possible biological effects of RF of the type emitted by wireless phones;
- Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and
- Cooperate in providing users of wireless phones with the best possible information on possible effects of wireless phone use on human health.

The FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the federal level. The following agencies belong to this working group:

- National Institute for Occupational Safety and Health
- Environmental Protection Agency
- Occupational Safety and Health Administration
- National Telecommunications and Information Administration

The National Institutes of Health participates in some interagency working group activities, as well.

The FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that limit RF exposure. The FCC relies on the FDA and other health agencies for safety questions about wireless phones.

The FCC also regulates the base stations that the wireless phone networks rely upon. While these base stations operate at higher power than do the wireless phones themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from wireless phones. Base stations are thus not the subject of the safety questions discussed in this document.

3. What kinds of phones are the subject of this update?

The term "wireless phone" refers here to handheld wireless phones with built-in antennas, often called "cell", "mobile", or "PCS" phones. These types of wireless

phones can expose the user to measurable Radio Frequency (RF) energy because of the short distance between the phone and the user's head. These RF exposures are limited by FCC safety guidelines that were developed with the advice of the FDA and other federal health and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is drastically lower because a person's RF exposure decreases rapidly with increasing distance from the source. The so-called "cordless phones," which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, and thus produce RF exposures far below the FCC safety limits.

4. What are the results of the research done already?

The research done thus far has produced conflicting results, and many studies have suffered from flaws in their research methods. Animal experiments investigating the effects of Radio Frequency (RF) energy exposures characteristic of wireless phones have yielded conflicting results that often cannot be repeated in other laboratories. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. However, many of the studies that showed increased tumor development used animals that had been genetically engineered or treated with cancer-causing chemicals so as to be pre-disposed to develop cancer in the absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per day. These conditions are not similar to the conditions under which people use wireless phones, so we do not know with certainty what the results of such studies mean for human health. Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, glioma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the studies demonstrated the existence of any harmful health effects from wireless phone RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of phone use in these studies was around three years.

5. What research is needed to decide whether RF exposure from wireless phones poses a health risk?

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological studies can provide data that is directly applicable to human populations, but ten or more years follow-up may be needed to provide answers about some health effects, such as cancer. This is because the interval between the time of exposure to a cancer-causing agent and the time tumors develop — if they do — may be many, many years. The interpretation of epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

6. What is the FDA doing to find out more about the possible health effects of wireless phone RF?

The FDA is working with the U.S. National Toxicology Program and with groups of investigators around the world to ensure that high priority animal studies are conducted to address important questions about the effects of exposure to Radio Frequency (RF) energy.

The FDA has been a leading participant in the World Health Organization International Electro Magnetic Fields (EMF) Project since its inception in 1996. An influential result of this work has been the development of a detailed agenda of research needs that has driven the establishment of new research programs around the world. The project has also helped develop a series of public information documents on EMF issues.

The FDA and the Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research And Development Agreement (CRADA) to do research on wireless phone safety. The FDA provides the scientific oversight, obtaining input from experts in government, industry, and academic organizations. CTIA-funded research is conducted through contracts with

independent investigators. The initial research will include both laboratory studies and studies of wireless phone users. The CRADA will also include a broad assessment of additional research needs in the context of the latest research developments around the world.

7. How can I find out how much Radio Frequency energy exposure I can get by using my wireless phone?

All phones sold in the United States must comply with Federal Communications Commission (FCC) guidelines that limit Radio Frequency (RF) energy exposures. The FCC established these guidelines in consultation with the FDA and the other federal health and safety agencies. The FCC limit for RF exposure from wireless phones is set at a Specific Absorption Rate (SAR) of 1.6 watts per kilogram (1.6 W/kg). The FCC limit is consistent with the safety standards developed by the Institute of Electrical and Electronic Engineering (IEEE) and the National Council on Radiation Protection and Measurement. The exposure limit takes into consideration the body's ability to remove heat from the tissues that absorb energy from the wireless phone and is set well below levels known to have effects. Manufacturers of wireless phones must report the RF exposure level for each model of phone to the FCC. The FCC website (http://www.fcc.gov/oet/rfsafety) gives directions for locating the FCC identification number on your phone so you can find your phone's RF exposure level in the online listing.

8. What has the FDA done to measure the Radio Frequency energy coming from wireless phones?

The Institute of Electrical and Electronic Engineers (IEEE) is developing a technical standard for measuring the Radio Frequency (RF) energy exposure from wireless phones and other wireless handsets with the participation and leadership of FDA scientists and engineers. The standard, "Recommended Practice for Determining the Spatial-Peak Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques", sets forth the first consistent test methodology for measuring the rate at which RF is deposited in the heads of wireless phone users. The test method uses a tissue-simulating model of the human head. Standardized

SAR test methodology is expected to greatly improve the consistency of measurements made at different laboratories on the same phone. SAR is the measurement of the amount of energy absorbed in tissue, either by the whole body or a small part of the body. It is measured in watts/kg (or milliwatts/g) of matter. This measurement is used to determine whether a wireless phone complies with safety guidelines.

9. What steps can I take to reduce my exposure to Radio Frequency energy from my wireless phone?

If there is a risk from these products — and at this point we do not know that there is — it is probably very small. But if you are concerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to Radio Frequency (RF) energy. Since time is a key factor in how much exposure a person receives, reducing the amount of time spent using a wireless phone will reduce RF exposure. If you must conduct extended conversations by wireless phone every day, you could place more distance between your body and the source of the RF, since the exposure level drops off dramatically with distance. For example, you could use a headset and carry the wireless phone away from your body or use a wireless phone connected to a remote antenna. Again, the scientific data does not demonstrate that wireless phones are harmful. But if you are concerned about the RF exposure from these products, you can use measures like those described above to reduce your RF exposure from wireless phone use.

10. What about children using wireless phones?

The scientific evidence does not show a danger to users of wireless phones, including children and teenagers. If you want to take steps to lower exposure to Radio Frequency (RF) energy, the measures described above would apply to children and teenagers using wireless phones. Reducing the time of wireless phone use and increasing the distance between the user and the RF source will reduce RF exposure.

Some groups sponsored by other national governments have advised that

children be discouraged from using wireless phones at all. For example, the government in the United Kingdom distributed leaflets containing such a recommendation in December 2000. They noted that no evidence exists that using a wireless phone causes brain tumors or other ill effects. Their recommendation to limit wireless phone use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists.

11. What about wireless phone interference with medical equipment?

Radio Frequency (RF) energy from wireless phones can interact with some electronic devices. For this reason, the FDA helped develop a detailed test method to measure Electro Magnetic Interference (EMI) of implanted cardiac pacemakers and defibrillators from wireless telephones. This test method is now part of a standard sponsored by the Association for the Advancement of Medical Instrumentation (AAMI). The final draft, a joint effort by the FDA, medical device manufacturers, and many other groups, was completed in late 2000. This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from wireless phone EMI.

The FDA has tested hearing aids for interference from handheld wireless phones and helped develop a voluntary standard sponsored by the Institute of Electrical and Electronic Engineers (IEEE). This standard specifies test methods and performance requirements for hearing aids and wireless phones so that no interference occurs when a person uses a "compatible" phone and a "compatible" hearing aid at the same time. This standard was approved by the IEEE in 2000.

The FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur, the FDA will conduct testing to assess the interference and work to resolve the problem.

12. Where can I find additional information?

For additional information, please refer to the following resources:

Federal Communications Commission (FCC) RF Safety Program

(http://www.fcc.gov/oet/rfsafety)
International Commission on Non-Ionizing Radiation Protection
(http://www.icnirp.de)
World Health Organization (WHO) International EMF Project
(http://www.who.int/emf)
National Radiological Protection Board (UK)
(http://www.hpa.org.uk/radiation/)

Driving

Check the laws and regulations on the use of wireless phones in the areas where you drive and always obey them. Also, if using your phone while driving, please observe the following:

- Give full attention to driving -- driving safely is your first responsibility;
- Use hands-free operation, if available;
- Pull off the road and park before making or answering a call if driving conditions or the law require it.

HAC statement

This phone has been tested and rated for use with hearing aids for some of the wireless technologies that it uses.

However, there may be some newer wireless technologies used in this phone that have not been tested yet for use with hearing aids.

It is important to try the different features of this phone thoroughly and in different locations, using your hearing aid or cochlear implant, to determine if you hear any interfering noise.

Consult your service provider or the manufacturer of this phone for information on hearing aid compatibility.

If you have questions about return or exchange policies, consult your service provider or phone retailer.

FCC Hearing-Aid Compatibility (HAC) Regulations for Wireless Devices

While some wireless phones are used near some hearing devices (hearing aids and cochlear implants), users may detect a buzzing, humming, or whining noise. Some hearing devices are more immune than others to this interference noise, and phones also vary in the amount of interference they generate.

The wireless telephone industry has developed a rating system for wireless phones, to assist hearing device users to find phones that may be compatible with their hearing devices. Not all phones have been rated. Phones that are rated have the rating on their box or a label located on the box.

The ratings are not guarantees.

Results will vary depending on the user's hearing device and hearing loss. If your hearing device happens to be vulnerable to interference, you may not be able to use a rated phone successfully.

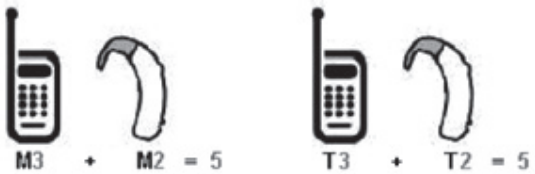
Trying out the phone with your hearing device is the best way to evaluate it for your personal needs.

M-Ratings: Phones rated M3 or M4 meet FCC requirements and are likely to generate less interference to hearing devices than phones that are not labeled. M4 is the better/higher of the two ratings.

T-Ratings: Phones rated T3 or T4 meet FCC requirements and are likely to generate less interference to hearing devices than phones that are not labeled. T4 is the better/higher of the two ratings.

Hearing devices may also be rated. Your hearing device manufacturer or hearing health professional may help you find this rating. Higher ratings mean that the hearing device is relatively immune to interference noise. The hearing aid and wireless phone rating values are then added together. A sum of 5 is considered acceptable for normal use.

A sum of 6 is considered for best use.



In the above example, if a hearing aid meets the M2 level rating and the wireless phone meets the M3 level rating, the sum of the two values equal M5. This should provide the hearing aid user with "normal usage" while using their hearing aid with the particular wireless phone. "Normal usage" in this context is defined as a signal quality that's acceptable for normal operation.

The M mark is intended to be synonymous with the U mark. The T mark is intended to be synonymous with the UT mark.

The M and T marks are recommended by the Alliance for Telecommunications Industries Solutions (ATIS). The U and UT marks are referenced in Section 20.19 of the FCC Rules.

The HAC rating and measurement procedure are described in the American National Standards Institute (ANSI) C63.19 standard.

To ensure that the Hearing Aid Compatibility rating for your phone is maintained, secondary transmitters such as Bluetooth and WLAN components must be disabled during a call.

For information about hearing aids and digital wireless phones

Wireless Phones and Hearing Aid Accessibility
http://www.accesswireless.org/

Gallaudet University, RERC
http://tap.gallaudet.edu/Voice/

FCC Hearing Aid Compatibility and Volume Control
http://www.fcc.gov/cgb/dro/hearing.html

The Hearing Aid Compatibility FCC Order
http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-03-168A1.pdf

Hearing Loss Association of America [HLAA]
http://hearingloss.org/content/telephones-and-mobile-devices

Wi-Fi Caution

This device is capable of operating in 802.11a/n/ac mode. For 802.11a/n/ac devices operating in the frequency range of 5.15 - 5.25 GHz, they are restricted for indoor operations to reduce any potential harmful interference for Mobile Satellite Services (MSS) in the US. Wi-Fi Access Points that are capable of allowing your device to operate in 802.11a/n/ac mode (5.15 - 5.25 GHz band) are optimized for indoor use only. If your Wi-Fi network is capable of operating in this mode, please restrict your Wi-Fi use indoors to not violate federal regulations to protect Mobile Satellite Services.

Laser safety statement

CDRH Compliance

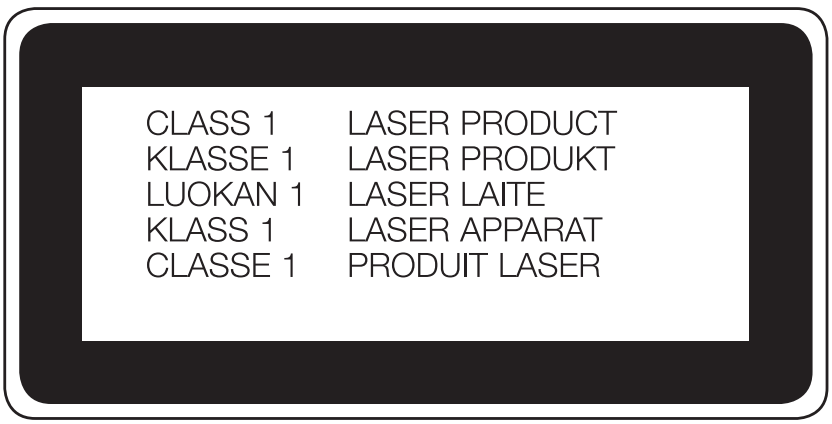
THIS PRODUCT COMPLIES WITH APPLICABLE REQUIREMENT OF THE DHHS PERFORMANCE STANDARD FOR LASER PRODUCT, 21 CFR SUBCHAPTER J.

Caution!

This product employs a Laser system. To ensure proper use of this product, please read this owner's manual carefully and retain for future reference. Should the unit require maintenance, contact an authorized service center.

Use of controls, adjustments, or the performance of procedures other than those specified herein may result in hazardous radiation exposure.

To prevent direct exposure to laser beam, do not try to open the enclosure or to make the direct contact with the laser.



Instructions for Wireless Charger

Be sure to use a wireless charger that is genuine or compatibility-certified (by WPC Qi standards).
(Wireless charger is sold separately.)

Limited Warranty Statement

1. WHAT THIS WARRANTY COVERS:

LG offers you a limited warranty that the enclosed subscriber unit and its enclosed accessories will be free from defects in material and workmanship, according to the following terms and conditions:

(1) The limited warranty for the product extends for TWELVE (12) MONTHS beginning on the date of purchase of the product with valid proof of purchase, or absent valid proof of purchase, FIFTEEN (15) MONTHS from date of manufacture as determined by the unit's manufacture date code.

(2) The limited warranty extends only to the original purchaser of the product and is not assignable or transferable to any subsequent purchaser/end user.

(3) This warranty is good only to the original purchaser of the product during the warranty period as long as it is in the U.S., including Alaska, Hawaii, U.S. Territories and Canada.

(4) The external housing and cosmetic parts shall be free of defects at the time of shipment and, therefore, shall not be covered under these limited warranty terms.

(5) Upon request from LG, the consumer must provide information to reasonably prove the date of purchase.

(6) The customer shall bear the cost of shipping the product to the Customer Service Department of LG. LG shall bear the cost of shipping the product back to the consumer after the completion of service under this limited warranty.

2. WHAT THIS WARRANTY DOES NOT COVER:

(1) Defects or damages resulting from use of the product in other than its normal and customary manner.

(2) Defects or damages from abnormal use, abnormal conditions, improper storage, exposure to moisture or dampness, unauthorized modifications, unauthorized connections, unauthorized repair, misuse, neglect, abuse, accident, alteration, improper installation, or other acts which are not the fault of LG, including damage caused by shipping, blown fuses, spills of food or liquid.

(3) Breakage or damage to antennas unless caused directly by defects in material or workmanship.

(4) That the Customer Service Department at LG was not notified by consumer of the alleged defect or malfunction of the product during the applicable limited warranty period.

(5) Products which have had the serial number removed or made illegible.

(6) This limited warranty is in lieu of all other warranties, express or implied either in fact or by operations of law, statutory or otherwise, including, but not limited to any implied warranty of marketability or fitness for a particular use.

(7) Damage resulting from use of non LG approved accessories.

(8) All plastic surfaces and all other externally exposed parts that are scratched or damaged due to normal customer use.

(9) Products operated outside published maximum ratings.

(10) Products used or obtained in a rental program.

(11) Consumables (such as fuses).

3. WHAT LG WILL DO:

LG will, at its sole option, either repair, replace or refund the purchase price of any unit that is covered under this limited warranty. LG may choose at its option to use functionally equivalent re-conditioned, refurbished or new units or parts or any units. In addition, LG will not re-install or back-up any data, applications or software that you have added to your phone. It is therefore recommended that you back-up any such data or information prior to sending the unit to LG to avoid the permanent loss of such information.

4. STATE LAW RIGHTS:

No other express warranty is applicable to this product. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MARKETABILITY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN. LG SHALL NOT BE LIABLE FOR THE LOSS OF THE USE OF THE PRODUCT, INCONVENIENCE, LOSS OR ANY OTHER DAMAGES, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THE USE OF, OR INABILITY TO USE, THIS PRODUCT OR FOR ANY BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING THE IMPLIED WARRANTY OF MARKETABILITY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO THIS PRODUCT.
Some states do not allow the exclusive limitation of incidental or consequential damages or limitations on how long an implied warranty lasts; so these limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

5. HOW TO GET WARRANTY SERVICE:

To obtain warranty service, please call or fax to the following telephone numbers from anywhere in the continental United States:

Tel. 1-800-793-8896

Or visit http://us.lgservice.com. Correspondence may also be mailed to:
LG Electronics Service- Mobile Handsets, P.O. Box 240007, Huntsville, AL 35824

DO NOT RETURN YOUR PRODUCT TO THE ABOVE ADDRESS. Please call or write for the location of the LG authorized service center nearest you and for the procedures for obtaining warranty claims.